THIS IS OUR SALESMAN



CORRY. :: :: :: PENNSYLVANIA



WHOLESALE

IRON AND STEEL

BLACKSMITHS', MILLMEN'S AND LUMBERMEN'S

SUPPLIES

CARRIAGES AND WAGONS
1909

NET PRICE LIST NUMBER 25

ins

DESTROY ALL PREVIOUS LISTS



JOHN A. SEAVERNS

Webster Family Library of Veterinary Medicine Cummings School of Veterinary Medicine at Tufts University 200 West oro Road North Emfroy MA 01536

No. 25

The Barlow Hardware Co.

CORRY, PA.

NET PRICE LIST

IRON AND STEEL

Wagon and Carriage Hardware, Woodstock and Carriage Trimmings, Blacksmith's Tools, Mill and Lumbermen's Supplies

Carriages and Wagons

Announcement

We solicit comparison of our prices with those of other houses from whom you have been buying and we feel very confident that you will find it much to your interest to, at least, try us with a sample order.

Our Goods are standard, same as are handled by other houses in the same line as ourselves. They are not inferior quality as some may try to make you believe. We are heavy buyers, pay spot cash for everything and are willing to sell them to you at a fair margin of profit.

A successful business career of over twenty years' duration, is, we think, an earnest recommend of our commercial standing.

To those who have been in the habit of dealing with us, we extend our thanks, and solicit from them a continuance of their patronage, while those who have not as yet bought from us, we ask for a trial order.

PLEASE READ CAREFULLY

TERMS.

The prices named in this Price List are net Cash, no discount, and subject to market changes without notice. Unless otherwise agreed cash must accompany orders. To responsible parties terms will be made not longer than thirty days. No extension of time after thirty days. We will not pay exchange or express charges, as all bills are made payable at our office.

SHIPMENTS.

We do not ship any goods by express, C. O. D. unless there is enough money with orders to pay charges both ways if goods are refused. All parties not known to us, or who are not rated well in commercial agencies, must pay in advance, or we will ship goods by freight in our own name and collect the bill through your banker by sending draft with bill of lading attached, if sufficient money is sent us with the order to cover freight charges, both ways. Be sure and give us the name and location of your bank. No goods will be shipped to irresponsible parties unless cash accompanies orders. If credit is desired, mail your reference with your order.

ERRORS.

We make them, so does everybody. If we make a mistake, write us about it and give us a fair chance to correct our errors. Mistakes can often be prevented if our customers will see that the following information is given in their orders:

1st. Write name and postoffice very plainly.
2nd. Tell us your shipment point if different from postoffice.

3rd. Date your order.

4th. How to be shipped.

5th. Quantity wanted.

6th. Articles wanted.

7th. Be sure and sign your name. We get many orders without signatures.

8th. If on R. F. D. Route give number of route.

HOW TO SEND MONEY.

Remit by postoffice money order, express money order, bank draft, or for small amounts postage stamps will be accepted. Do not under any circumstances send money in a letter, except by registered mail.

OUR SHIPPING FACILITIES

Are excellent, Corry, Pa., is situated on the following railroads: Erie, Pennsylvania, and Philadelphia & Erie of Pennsylvania Railroad. We can ship in all directions on trunk lines. We have the following express companies: Wells Fargo, American and Adams. Unless otherwise specified goods are F. O. B. cars Corry. Where shipment from factory is deemed desirable it is stated in catalogue. Our responsibility ceases when goods are delivered to transportation company. When reporting a shortage, have your agent properly note shortage on paid freight bill and send the bill to us.

CLAIMS.

Claims for mistakes, etc., must be made immediately upon receipt of goods. Do not under any circumstances return any goods without first writing us and receiving shipping instructions, as in some cases goods should go direct to factory, thus saving freight charges.

OUR RESPONSIBILITY.

We have been engaged in this business in Corry for over twenty years, and own the ground and buildings we occupy (as well as the goods contained therein) which consists of seven buildings, giving us a floor space of 50,000 square feet. To those unacquainted with us, our ability and willingness to perform our part of the contract, we refer to any resident or business house of Corry, and by permission to the Citizens National Bank, or the National Bank of Corry.

Our financial standing can be ascertained of any of the commercial agencies, or of any reputable bank in America.

reputable bank in Americ

OUR DESIRE

Is to please you by giving you the best goods in the market at lowest prices, by prompt shipment of goods and by courteous treatment in all cases. We will appreciate all orders, large or small, and give each our most careful attention.

REMARKS ABOUT FREIGHT.

Many blacksmiths and wagon makers, located

in different parts of the country, upon receiving our catalogue, write us saying: Your prices are very MUCH LOWER than we have been paying, but won't the freight from Corry to our city make up the difference? To such we say most emphatically NO. It is our aim to sell you goods with freight added, for less money than you can buy nearer home. The weight tables which follow will enable you to estimate the cost of delivery to your freight station.

It is very important that customers should write plainly their name and postoffice address. In case there is no railroad running through your town and the goods are to go to some other town where there is a railroad, give the name of that town plainly and also the county it is in.

ESTIMATED WEIGHT OF ROUND AND SQUARE IRON.

	Round.		One Foot	in Length.		Square.	
Diam.	Weight.	Diam.	Weight.	Size.	Weight.	Size.	Weight.
3 16	.094	1	2.654	1/4	.241	11/8	4.278
1/4	.165	11/8	3.360	1 ⁵ 6	.330	11/4	5.280
5 16	.261	11/4	4.172	3/8	.475	1 3/8	6.390
3/8	.373	13/8	5.019	7	.647	1 1/2	7.604
7	.508	1 1/2	5.972	1/2	.845	15/8	8.926
1/2	.663	15%	7.010	16	1.069	1 3/4	10.352
9	.840	1 3/4	8.128	5/8	1.320	17/8	11.883
5/8	1.043	2	10.616	3/4	1.901	2	13.520
3/4	1.493	21/4	13.440	7/8	2.588	21/4	17.112
7/8	2.032	2 1/2	16.688	1	3.380	2 1/2	21.120

For prices of Round and Square Iron, see pages 4 and 5.

ESTIMATED WEIGHT OF FLAT ROLLED IRON.

One Foot in Length.

			1	Thickne:	ss.					
½ in.	in.	1/4 in.	5 in.	3∕8 in.	7 in.	½ in.	5∕8 in.	3/4 in.	7∕8 in.	1 in.
.242	.316	.422	.528	.634	.738	.845	1.056	1.265	1.477	1.690
.276	.395	.528	.660	.792	.923	1.060	1.320	1.584	1.846	2.112
.316	.474	.633	.792	.950	1.108	1.265	1.584	1.901	2.217	2.534
.369	.553	.738	.923	1.108	1.294	1.477	1.846	2.217	2.588	2.956
.422	.632	.845	1.056	1.267	1.478	1.690	2.112	2.534	2.956	3.380
.474	.711	.950	1.187	1.425	1.663	1.901	2.375	2.850	3.326	3.802
.528	.790	1.056	1.320	1.584	1.848	2.112	2.640	3.168	3.696	4.224
.581	.868	1.161	1.452	1.742	2.032	2.325	2.904	3.842	4.065	4.646
.634	.949	1.266	1.584	1.900	2.217	2.535	3.168	3.802	4.435	5.069
.687	1.027	1.372	1.716	2.059	2.402	2.746	3.432	4.119	4.805	5.492
.740	1.106	1.479	1.848	2.218	2.589	2.957	3.696	4.435	5.178	5.914
.793	1.185	1.584	1.980	2.376	2.772	3.168	3.960	4.752	5.544	6.336
.846	1.264	1.689	2.112	2.534	2.957	3.379	4.224	5.069	5.915	6.758
.899	1.343	1.795	2.244	2.693	3.141	3.591	4.488	5.385	6.283	7.181
.952	1.422	1.900	2.376	2.851	3.326	3.802	4.751	5.703	6.653	7.604
1.005	1.501	2.006	2.508	3.009	3.511	4.013	5.016	6.019	7.022	8.025
1.058	1.580	2.112	2.640	3.168	3.696	4.224	5.280	6.336	7.392	8.448
1.264	1.659	2.332	2.904	3.485	4.066	4.647	5.808	6.970	8.132	9.294
1.370	1.817	2.535	3.168	3.802	4.435	5.069	6.337	7.604	8.871	10.138
1.476	1.975	2.746	3.432	4.119	4.805	5.492	6.865	8.237	9.610	10.983
1.582	2.132	2.957	3.696	4.436	5.175	5.914	7.393	8.871	10.350	11.828
1.688	2.291	3.168	3.960	4.752	5.544	6.336	7.921	9.505	11.089	12.673
1.794	2.449	3.380	4.224	5.069	5.914	6.759	8.448	10.138	11.828	13.518
	.242 .276 .316 .369 .422 .474 .528 .581 .634 .687 .740 .793 .846 .899 .952 1.005 1.058 1.264 1.370 1.476 1.582	.242 .316 .276 .395 .316 .474 .369 .553 .422 .632 .474 .711 .528 .790 .581 .868 .634 .949 .687 1.027 .740 1.106 .793 1.185 .846 1.264 .899 1.343 .952 1.422 1.005 1.501 1.058 1.580 1.264 1.659 1.370 1.817 1.476 1.975 1.582 2.132	.242 .316 .422 .276 .395 .528 .316 .474 .633 .369 .553 .738 .422 .632 .845 .474 .711 .950 .528 .790 1.056 .581 .868 1.161 .634 .949 1.266 .687 1.027 1.372 .740 1.106 1.479 .793 1.185 1.584 .846 1.264 1.689 .899 1.343 1.795 .952 1.422 1.900 1.005 1.501 2.006 1.058 1.580 2.112 1.264 1.659 2.332 1.370 1.817 2.535 1.476 1.975 2.746 1.582 2.132 2.957 1.688 2.291 3.168	½ in. ¼ in. ¼ in. fe in. .242 .316 .422 .528 .276 .395 .528 .660 .316 .474 .633 .792 .369 .553 .738 .923 .422 .632 .845 1.056 .474 .711 .950 1.187 .528 .790 1.056 1.320 .581 .868 1.611 1.452 .634 .949 1.266 1.584 .687 1.027 1.372 1.716 .740 1.106 1.479 1.848 .793 1.185 1.584 1.980 .846 1.264 1.689 2.112 .899 1.343 1.795 2.244 .952 1.422 1.900 2.508 1.058 1.580 2.112 2.640 1.264 1.659 2.332 2.904 1.370 1.817 2.535	y_6 in. q_8 in. y_4 in. q_8 in. y_4 in. y_8 in. <	.242 .316 .422 .528 .634 .738 .276 .395 .528 .660 .792 .923 .316 .474 .633 .792 .950 1.108 .369 .553 .738 .923 1.108 1.294 .422 .632 .845 1.056 1.267 1.478 .474 .711 .950 1.187 1.425 1.663 .528 .790 1.056 1.320 1.584 1.848 .581 .868 1.161 1.452 1.742 2.032 .634 .949 1.266 1.584 1.900 2.217 .687 1.027 1.372 1.716 2.059 2.402 .740 1.106 1.479 1.848 2.218 2.589 .793 1.185 1.584 1.980 2.376 2.772 .846 1.264 1.689 2.112 2.534 2.957 .899 1.343 1.795 2.244 2.693 3.141 .952 1.4	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	y_6 in. q_6 in. <	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

For prices of Flat Iron, see pages 4 and 5.

IRON.

. ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

IRON TIRE.

Sets of 2 Bars 12 ft. and 2 Bars 15 ft. Lengths.

WE KEEP ROUND EDGE TIRE ONLY.

			t pric					t_price					t price	
Sizes.			Hind Each		Sizes.		Front Each.			Sizes.			Hind Each.	
3/4×1/4					1½x5%	in	.74	.92	3.30	2½x¾	in.	\$1.45	\$1.81	\$6.50
7/8×1/4			.26	.92	15/8×1/2	in	.65	.79	2.85	3 x3/8	in.	.87	1.06	3.85
1 x½	in	.23	.29	.96	15/8×5/8	in	.79	.99	3.55	3 x ½	in.	1.16	1.38	5.05
1 x 15	in	.28	.35	1.25	15/8×3/4	in	.95	1.19	4.27	3 x 5/8	in.	1.42	1.77	6.35
11/8×1/4	in	.25	.31	1.10	13/4×3/8	in	.50	.63	2.25	3 x3/4	in.	. 1.71	2.13	7.65
11/8×16	in	.28	.40	1.35	13/4 x 1/2	in	.70	.84	3.05	3½x 15	in.	90	1.17	4.14
11/8×3/8	in	.34	.44	1.55	13/4×5/8	in	.87	1.04	3.80	3½x¾	in.	. 1.02	1.29	4.60
11/4 x 1/4	in	.29	.37	1.31	1¾x¾	in	1.03	1.28	4.60	3½x½	in.	. 1.38	1.68	6.10
11/4 x 15	in	.34	.44	1.55	2 x3/8	in	.56	.72	2.55	3½x5/8	in.	. 1.71	2.12	7.65
11/4 x 3/8	in	.37	.48	1.70	2 x½	in	.77	.96	3.46	3½x¾	in.	. 1.99	2.36	8.70
11/4 x 1/2	in	.52	.63	2.29	2 x 5/8	in	.96	1.21	4.30	4 x 15	in.	. 1.11	1.31	4.84
13/8×3/8	in	.41	.55	1.92	2 x 3/4	in	1.20	1.46	5.30	4 x3/8	in.	. 1.16	1.39	5.10
13/8×76	in	.50	.63	2.25	2½x¾	in	.72	.87	3.15	4 x ½	in.	. 1.64	2.01	7.30
13/8×½	in	.58	.71	2.55	2½x½	in	.96	1.17	4.25	4 x 5/8	in.	. 1.91	2.44	8.70
1½x¾	in	.42	.56	1.95	$2\frac{1}{2} \times \frac{5}{8}$	in.	1.21	1.47	5.35	4 x 3/4	in.	. 2.24	2.71	9.90
$1\frac{7}{2}x\frac{7}{16}$	in	.52	.65	2.30										
1½x½	in	.61	.73	2.65										

SQUARE IRON.

Sizes. Net price per 100 lbs.	Sizes. Net price per 100 lbs.	Sizes. Net price per 100 lbs.
1½ inch\$1.70	7/8 inch\$1.80	7 inch\$2.10
13% inch 1.70	3/4 inch 1.80	3/8 inch 2.30
1¼ inch 1.70	5% inch 1.90	5 inch 2.50
1½ inch 1.70	9 inch 1:90	1/4 inch 2.70
1 inch 1.70	½ inch 2.10	

· See Table of Weights of Iron, page 3.

Iron cut to length, 1 cent per pound extra.

IRON CUT TO LENGTH 1 CENT PER POUND EXTRA.

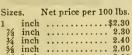
ROUND IRON.

11/2 incl	Net price per 100 lbs. 1\$1.70	1 inc	Net price per 100 lb h\$1.7 h 1.8	70 Te inch	Net price per 100 lbs\$2.10 2.30
- / 0	1 1.70	67	h 1.8 h 1.8	50 5 300	2.50
1¼ incl	1 1.70		h 2.0	00 ½ inch	2.70
11% incl	1 1.70	½ inc	h 2.1	$10 \mid \frac{3}{16} \text{ inch}$	4.70

HEAVY BAND AND STAKE IRON.

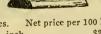
LIGHT BAND IRON.

HALF OVAL IRON.



inch 3.00

HALF ROUND IRON



Sizes		Νe	t į	ri	ce	pe	r 1	00	lbs.
1	inch							.\$	2.30
7/8	inch								2.30
3/4	inch								2.40
5/8	inch							. '	2.60
1/2	inch								3.00

OVAL IRON.



WAGON BOX IRON.



Sizes. % inch, % inch,	No. 12, No. 12,	Bevel Bevel	Net price p Edge Edge	 \$2.95

HOOP IRON.

			OUL A			
Sizes.				Net	price pe	r 100 lbs.
1½ inch,	No.	16				\$3.40
11/4 inch,	No.	18				3.40
11/8 inch,	No.	19				3.65
1 inch,	No.	19				3.65
						3.90
3/4 inch.	No.	22				4.15

SHAFT OR PERCH IRON.



n 1 P1

		Bevel Eage.
Sizes.		Net price per 100 lbs.
11/4 x 3/8		\$2.10
11/4 x 18		
11/8 X 16		
1 x 18		2.35
1 x1/4	inch	2.60

ANGLE STEEL.

Factory shipments only.

Sizes. Net price per 100 lbs. 1¼ inch and heavier..........\$3.00 Iron cut to length 1 cent per pound extra.

Iron and Steel Cut to Length 1 Cent per Pound Extra

нон	RSE SHOE BAR.
Sizes.	Net price per 100 lbs.
5/8 x 3/8	inch\$2.45
5/8 x 1/2	inch 2.45
3/4 x 3/8	inch 2.45
3/4 x 1/2	inch 2.45
7/8 x 3/8	inch 2.45
7/8 x 1/2	
1 x 3/8	
1 x½	
1 x5%	
11/4 x 3/8	

NORWAY OR SWEDES IRON.

IMPORTED.

Sizes. Net price per 100 lbs. Flats, 1 x¾ to 3x½ in.. \$4.00 Flats, 34x¼ to 3x½ in.. 4.00 Rounds, 1 to 1¼ diam. 4.00 Rounds, ½ to ½ diam. 4.00 Rounds, ¼ to ½ diam. 4.00 Squares, 1 to 2 diam. 4.00 Squares, 5% to ½ diam. 4.00 Squares, ½ to

Cut to length 1 cent per pound extra.

TOE CALK STEEL.

Round Edge.

	Round Edge.
Sizes.	Net price per 100 lbs.
1 x½	inch\$2.50
$1 x_{16}^{7}$	inch 2.50
7/8 x 1/2	inch 2.50
$\frac{7}{8}$ x $\frac{7}{16}$	inch 2.50
7/8 x 3/8	inch 2.50
3/4 x 1/2	inch 2.50
$\frac{3}{4}$ x $\frac{7}{16}$	inch 2.50
5/8 x 3/8	inch 2.50
3/4×3/8	inch 2.50
5/8 x 1/2	inch 2.50
18 x 5/8	inch 2.50
$\frac{1}{2} \times \frac{7}{16}$	inch 2.50
½x3/8	inch 2.50
75 x 3/8	inch 2.50
7/8×16	inch 2.75
3/4 x 18	inch 2.75
5/8 X 15	inch 2.75
1/2 X 18	inch 2.75
7 X 16	inch 3.10
3/8 X 16	inch 3.10
3/4×1/4	inch 3.25
5/8×1/4	inch 3.25
½x¼	inch 3.25
18 X 1/4	inch 3.75
3/8 x 1/4	inch 3.75
16 X 1/4	inch 3.75

Less than 100 pound bundle 1/4 cent per lb. extra.

FLAT SPRING STEEL.

Sizes.	Net price per	lb.
2 13/4	1½ 1¾ 1¼x	1/4
inch		3½c

Cut to length 1 cent per lb. extra.

ROUND MACHINERY STEEL

Size	es. N	et price per 100 lbs.
11/2	inch	\$1.95
13/8	inch	1.95
11/4	inch	1.95
11/8	inch	1.95
1	inch	1.95
7/8	inch	1.95
3/4	inch	1.95
5/8	inch	2.05
1/2	inch	2.15
3/8	inch	2.45
5 16	inch	2.55

CANT HOOK STEEL.

Sizes.		Net	price	per	1b.
%x½	inch				.5c
$1 x_{16}^{7}$	inch				.5c
11/8×76	inch				.5c
11/4 x 1/2	inch				.5c

SLEIGH SHOE STEEL.

0 43434 0	
Sizes.	Net price per 100 lbs.
7/8 x 1/2	inch\$2.00
1 x½	inch 2.00
11/4 x 1/2	inch 2.00
1½x½	inch 2.00
134x1/2	inch 2.00
2 x ½	inch 2.00
21/2x1/2	inch 2.00
3 x ½	inch 2.00
1½x5/8	inch 2.00
13/4×5/8	inch 2.00
2 x5/8	inch 2.00
21/2x5/8	inch 2.00
3 x5/8	inch 2.00

STRUCTURAL STEEL. CHANNELS.

I BEAMS.
ANGLES.

Prices quoted on application.

Shipped from factory.

TOOL STEEL.

McInnis.

8 to 10 ft. bars.

5/8	to 1	½ squ	are		8c
5/8	to 1	½ rou	nd .		8c
5/8	to 1	√2 oct	agon		8c
9 16	and	1/2 S	quare		81/2c
76	and	3/8 S	quare		9c
5 16	and	1/4 S	quare		.10c
9 16	and	1/2 r	ound.		8½c
7 16	and	3/8 r	ound.		9c
5 16	and	1/4 r	ound.		.10c
9 16	and	1/2 00	ctagon		.8½c
7	and	3/8 00	ctagon		9c
5	and	1/4 (ctago	n	10c
1	to	3x1/2	flat.		9c
1	to	3x3/8	flat.		9c
3/	í to	3x 16	flat.		.9½c
3/	•	3x 1/4			
7.	1 60	OA /4	11000		

Steel cut to length 1 cent per pound extra.

STEEL BUGGY TIRE.

Round Edge.



-				
Sizes		Front	price Hind Each	Per
3/4×16	in	0.18	\$0.20	\$0.65
$\frac{3}{4} \times \frac{7}{32}$	in	.21	.23	.75
3/4×1/4	in	.23	.25	.80
7/8×16	in	.21	.23	.75
7/8 X 3/2	in	.24	.26	.85
7/8×1/4	in	.25	.28	.90
7/8×16	in	.31	.35	1.15
1 x18	in	.21	.23	.80
1 x1/4	in	.28	.34	1.05
1 x 15	in	.35	.40	1.30
11/8×1/4	in	.31	.35	1.15
11/8 x 5	in	.39	.44	1.45
11/8 x 3/8	in	.48	.54	1.80
11/4×1/4	in	.39	.44	1.45
11/4×15	in	.43	.48	1.60
11/4 x 3/8	in	.52	.58	1.95
13/8×3/8	in	.60	.65	2.25
11/2 x 3/8	in	.62	.67	2.30
,				

CABLE CHAIN.



Straight.



Twist Link.

Size 16 1/4 16 3/8 7/8 1/2 5/8 Net price, lb. 10 61/2 5 41/2 41/2 4 4 Weight, 100 ft., lbs. 50 90 122 160 200 250 420 590

We carry Twist Link Chain in 1/4 and 1/6 inch only. For Twist Link Chain add 1/2c per lb. to above.

BURKE'S TOE CALKS.





Sizes. Net price per 25 lb. box.

1/2 cent per pound extra in less than full boxes.

STANDARD TOE CALKS.



Sizes. Net price per 25 lb. box. Long Blunt, Nos. 0 to 6......\$1.15

1/2 cent per pound extra in less than full boxes.

STEEL CUTTER SHOES.

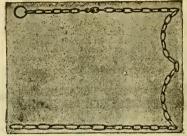
TAPERED AND BENT. Sizes. Net price per pair. 3/4 x 3/8 inch\$0.42 $34x\frac{7}{16}$ inch 3/4 x 1/2 inch 7/8 x 3/8 inch ½x¼ inch ⅓x½ inch49 inch60 x 1/2 inch69 x5% inch89

BUTT CHAINS.



Sizes. Net prices per pair. 30 in, long, 10 links to ft., No. 2 wire\$0.30 .35 30 in. long, 10 links to ft., No. 2 wire with Snaps38

TRACE CHAINS.

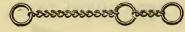


Sizes. Net price per pair. 6½ feet long, 10 links to foot, No. 2 Wire with Rings\$0.45 61/2 feet long, 10 links to foot, No. 2 Wire with Hooks .50 61/2 feet long, 10 links to foot, No. 2 Wire with Snaps .55 7 feet long, 10 links to foot, No. 2 Wire with Rings . .55 7 feet long, 10 links to foot, No. 2 Wire with Hooks .60 7 feet long, 10 links to foot, No. 2 Wire .65 with Snaps

STAY CHAINS.

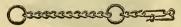
Net price per pair. Sizes. 5 Link, 5 Hook

TONGUE CHAINS.



Net price per pair. Sizes\$0.42 5 Link, 1/2 Ring

LOCK CHAINS.



Net price per pair. ⁵ Link, 42 in. long\$0.80

CAST BOB SLED SHOES.

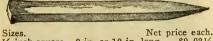


Sizes32 34 36 38 40 42 44 Net price per 1b......\$0.03



Size		11/8	:	Como	Nead		per	
11/4	and	1½x¼	in.	Cone	Head	 		.07
					tersunk tersunk			.07

STEEL HARROW TEETH.



½ inch square, 9 in. or 10 in. long...\$0.02½
56 inch square, 10 in. or 11 in. long... .03½
34 inch square, 10 in. or 11 in. long... .06
36 inch square, 12 in. long... .08

STEEL CROW BARS.



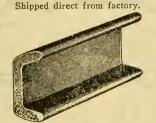
WEDGE POINT.
Sizes, inches 1 1½ 1½ 1¾
Net price each......\$0.40 .45 .60 .80

WOOD-CHOPPERS' WEDGES.



REGULAR PATTERN.
Solid Steel, Axe Finish, Net price, lb..\$0.05½

STEEL CHANNEL TIRE.



		$\mathbf{F}($	Οl	R	S	ΟI	IJ	D	I	₹	JE	B	ΕI	₹′	TII	RE.			
ze:	S.			-6]	Ne	t pi	rice	e pe	t set.	
4	inch																	\$0.90	
8	inch																	1.12	
																		1.25	
6	inch			. ,		٠.												1.55	
Fo	or w	he	ee	ls	3	f	t.	4		in.		an	d	3	ft.	8	in.	high	
1																			

For price of Rubber Tire, see Wheels.

Si

3

11



Wroug	ht Iron.
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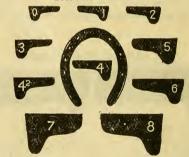
Siz	Flat Hooks. Net price each.										each.						
		Grab Grab															
3/8	inch	Grab Grab	or	Flat.													.09
1/2	inch	Grab	or	Flat.													.14
5/8	inch	Grab	or	Flat.		٠	•		٠	•	• •	٠	• •	•	٠		.18

COLD SHUTS.



B. & M. PATENT RIBBED STEEL.

Sectional Views of



Weights per ft. of Steel Eight ft. Bars.

		_		
Net				t price
₽€	er lb.			per lb.
Sizes. Oz. to ft.		Sizes. (z. to ft.	
No. 0 3 ½ \$0.	.12	No. 4 1/2	. 9	0.091/2
No. 14½	.11	No. 5	.11	.091/2
No. 2 5 ½	.11	No. 6	.13	.09
No. 3 6½	.10	No. 7	.211/2	.08
No. 4 7½	.091/2	No. 8	.25	.08
**	1 6 0	3 - 1 0	1	

Unsurpassed for Track Shoeing.

This steel has been in use several years all over the country, on many of the best horses giving the most satisfactory results.

Shoes of this design give a sure, firm and natural foothold on any kind of road or track; do not cup, and prevent slipping.

They give a greater bearing surface for the foot, and are stiffer than any shoe of equal weight.

Decreased striking surface prevents concussion; the horse will go with less weight and shorter foot than with any other plain shoe. For road work they are unequaled.

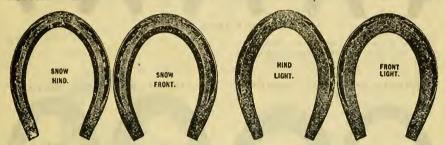
BARLOW IRON HORSE SHOES.

SPECIAL OFFER BARLOW IRON SHOES

ALL PATTERNS AND SIZES 2 TO 6

1 KEG OR MORE, \$3.75 PER KEG

ASSORTED KEGS CONTAINING MORE THAN ONE SIZE, 15c PER KEG EXTRA



BARLOW IRON SNOW SHOES.

BARLOW IRON LIGHT SHOES.

Si	ze	3.		Barlow				3	PER	KEC	à,			Ne	et	price	De	r	keg.
No.	2	to	6	Barlow	Iron	light	patter	n				 	 	 				.\$	3.75
No.	0	to	1	Barlow	Iron	light	patte:	rn				 	 	 					4.00
No.	2	to	6	Barlow	Iron	extra	light	pattern	1			 	 	 					3.75
No.	0	to	1	Barlow	Iron	extra	light	pattern	1			 	 	 					4.00
No.	2	to	6	Barlow	Iron	snow	patter	n				 	 	 					3.75
No.	0	to	1	Barlow	Iron	snow	patter	n				 	 	 					4.00

Stock assortments one size all front—one size all hinds—one size front and hinds. Kegs containing more than one size 15 cents extra. Shoes less than 100 lbs. 4½ cents per pound.

THE BARLOW IRON HORSE SHOES.

Have been used by hundreds of the leading horseshoers for five years past—they are made from the best iron—we will guarantee them to give satisfaction in every possible way or they can be returned at our expense.

SEND US AN ORDER FOR A SAMPLE LOT.

BOSS STEEL TROTTING PLATES.

THE BOSS STEEL RACING PLATE.

TOED RACING PLATES.



Sizes. Price Per Set.
No. 0 to 4.........35c
Postage per set......35c





Sizes. Price Per Set.
No. 0 to 4............75c
Postage per set.......20c

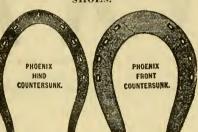
HORSESHOES.

Fifteen cents extra for assorted kegs containing more than one size.



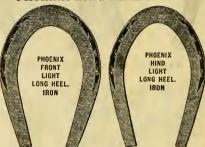
PHOENIX IRON SHOES.	
	Net price per keg.
No 0 to 8 Phoenix Light Iron Shoes	\$4.15
No. 0 to 6 Phoenix Extra Light Iron Shoes	4.15
No 0 to 8 Phoenix Iron Snow Shoes	4.15
No. 0 and 1, 25 cents advance. Price, less than 100 lbs., 4½c per pound.	

PHOENIX STEEL COUNTERSUNK SHOES.



Sizes. Net price per 100 lbs. No. 0 to 5 Front and Hind......\$5.35

PHOENIX LONG HEEL SHOES.



 Sizes.
 Net price per 100 lbs.

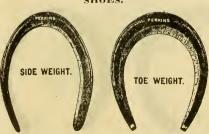
 No. 2 to 7 Front and Hind.
 \$4.15

 No. 0 to 1 Front and Hind.
 4.40

BURDEN IRON SHOES.

Sizes.		Net price per keg.
No. 0	8 Burden Light Iron Shoes	\$4.15
No 0	7 Rurden Extra Light Iron Shoes	4.10
No. 0	8 Burden New Easy Iron Snow Shoes	4.10
S ⁻	ck assortment, one size all front—one size all hinds—one size front	and hinds. Price
less tl	n 100 lbs. 4½c per pound.	

PERKINS' TOE AND SIDE WEIGHT SHOES.



Net price per 100 lbs.
Side Weights, 0 to 4, Hinds only.....\$8.35
Toe Weights, 0 to 4, Fronts only..... 6.35

PHOENIX EXTRA EXTRA LIGHT STEEL SHOES.



Price less than 100 lbs. 1/4c per pound extra.

OX SHOES.



				price per	
Эх	Shoes,	all	sizes	 \$	0.11

MULE SHOES.



Net price per keg. Mule Shoes, all sizes\$4. Price less than kegs, 4½ cents per pound.

BARLOW HORSE NAILS.

The tensile strength of iron used in the manufacture of the BARLOW HORSE NAIL manufacture of the BARLOW HORSE NAIL surpasses that of any other material used for Horse Nails, and combining, as it does, every quality for a superior Nail, we get, by our process, a soft and uniform Nail, hardened at the extreme point for driving, the same as when made by hand, and believe we offer to the trade the most perfect Horse Nails in America; in other words, we give a better article of the corresponding to the surprise of the same as t ticle at the same price.

HORSE SHOE NAILS.



	Net price		Net price
Sizes	per lb.	Sizes	per lb.
No. 5	\$0.10	No. 8 .	\$0.10
No. 6		No. 9 .	10
No. 7		No. 10 .	10

RELIANCE HORSE NAILS.

	Net price		Net price
Sizes			per lb.
No. 5	\$0.12		\$0.12
No. 7		No. 10	

CAPEWELL HORSE NAILS.

	Net price		Net price
Size:	per lb.	Size:	per lb.
No. 4	Lowest	No. 8	Lowest
	market		
No. 6	price.	No. 10	price.
No. 7]	

A full stock of Capewell Nails always on hand.

VULCAN HORSE NAILS.

	Net price		Net price
Sizes	per lb.	Sizes	per lb.
No. 4	\$0.35	No. 8	\$0.14
No. 5	17½		
No. 7	14 1/2		

Note-We have all of above Nails in both regular and city heads packed in 5 lb. paper boxes and 25 lb. wood boxes.

Nails in less than 5 lb. boxes, 2 cents per pound extra.

GAISTER MFG. CO.'S PEAT MOSS PETROLEUM HOOF PACKING.



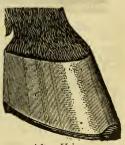
Before Using.

All others are imitation.

For use in the stable and shoeing Forge. A sure preventive and cure for all diseases which horses' feet are liable to. It has cured hundreds. No hoof can remain hard and unhealthy where it is used. You need not change the packing should your horse remain in the stable a month at a time.

Used under leather with perfect satisfaction. It will never dry, and will not act as a poultice. It is Nature's own remedy.

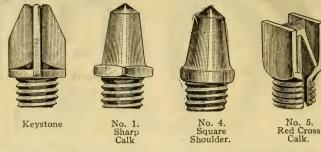
No. 1. 20 lb. buckets.....\$1.25 each No. 2. 10 lb. buckets..... .90 each



After Using.

NEVERSLIP CALKS.

THEY SAVE MONEY AND MAKE CUSTOMERS. EVERY SHOER SHOULD USE ONE.



STYLES OF CALKS TO USE.

Same Price Applies to All.

Particular attention is directed to the selection of a style of calk suitable for the work you have in hand, care being used that calks be selected to suit conditions.

- No. 1 Calks are adapted for snow and ice conditions, streets and roads slippery and a sure footing impossible. Under these conditions the Nos. 1 and 4 Calks have no equal, and will do all the manufacturers claim for them. They positively "NEVERSLIP."
- No. 4 is the same as No. 1, except it has a square shoulder, requiring no special wrench to insert or remove.
- No. 5 For asphalt or other hard pavements. Its construction being such that it wears flat, and the flatter the wear, the sharper the angles become, making it impossible to slip in any direction.
- "KEYSTONE" Calks are made of an H shape material. This calk possesses features different from other calks and has many friends. Is good with or without snow or ice.

 Any style Neverslip Calk interchangeable with any other style of the same size.

Sold only in boxes of 50.

Size, inches 5	3/8	$\frac{7}{16}$	1/2	16	5/8
Net price, per 100 Red Tip\$2.00	\$2.20	\$2.40	\$2.60	\$2.80	\$3.20
Net price, per 100 Blizzard 1.80	2.00	2.20	2.40	2.60	3.00

Keystone, all sizes, \$2.00 per 100; Red Cross, all sizes, \$2.00 per 100.

to Calks made only in Style No. 1.

NEVERSLIP HAND TAPS.

HOS YOU MARK

No other taps can be used with Neverslip Calks.

Sizes	3/8	7	1/2	9	5/8	in.
Hand25	30	35	40	45	50c	ea.
Stub	30	35	40	45	50c	ea.

Neverslip Hand Taps are for cutting threads in the Calk holes by hand, and are used with an ordinary tap wrench. They are made to cut a thread that corresponds exactly to the thread on the Calk, and are the only ones that can be successfully used.

NEVERSLIP TWIST DRILLS.

When using Neverslip Calks in hand-made Shoes it is necessary to use Neverslip Twist Drills of following sizes, as they are the only correct sizes for Neverslip Taps and Calks. Size of Drill ... 1/4 19-64 23-64 1/2 29-64 33-64 To drill hole for Tap and Calk... 1/2 3/4 1/4 1/4 5/5 in.

Tap and Calk... 15 38 78 1/2 18 5/8 in 1/2 in. Shank.... 32 38 43 46 51 60c ea

NEVERSLIP TAPPING MACHINE.

Shipped direct from factory.

Consists of a base or frame in connection with a hand wheel and sliding shaft for the rapid cutting or tapping of threads for calks.

Net price each

Without taps\$6.50 With full set of Tapper Taps 8.25

NEVERSLIP HORSE SHOES.

NEVERSLIP SHOES are furnished in two styles, viz.:

1st, DRILLED. Have holes drilled for Neverslip Taps and Calks, and are sold by keg or pound only.

2nd, CALKED. Have Calks inserted. Are sold by the set and pair. Packed 5 set or 10 pair in a box. Drilled shoes are now sold at a price that simply covers the cost of drilling the holes (about 4 cents a set) and are therefore much cheaper for the shoer than the Blank Shoes without boles.

NEVERSLIP DRILLED SHOES.



WEIGHT OF DRILLED SHOES.

Weight	front		0-11			for 3/	all call
44	44	66	1-12	66	66	3/8	"
44	66	66	2-15	66	66	7	. "
66	66	46	3-17	66	66	.7	
44	6.6	66	4-21	66	4.6	1/2	66
44	66	6.6	5-29	66	46	9	"
66	4.6	46	6-32	66	66	5/9	66
66	66	66	7-36	66	66	5/9	64
66	44	66	8.42	66	66	5/6	- 64

NEVERSLIP STUB TAPS.



For use in repairing any damage to threads in Calk holes without removing the shoe.

Sizes, inches.. 15 3/8 17 1/2 17 5/8 Net price, ea..\$0.25 .30 .35 .40 .45 .50

NEVERSLIP WRENCH.



NEVERSLIP CALKED SHOES.



NEVERSLIP SHOES.—PRICES.

Net prices per lb.
Iron Shoes, No. 2 and larger, drilled \$0.063/4
Iron Shoes, No. 0 and 1
Steel Light Hind, No. 2 & larger, drilled .09
Steel Light Hind, No. 0 or 1
Net price per set
Calk Iron Shoes, sizes 0 and 1\$0.70

Calk	Iron	Shoes.	sizes	0 and	1\$0	
66	66	"			2	
66	"	66	66		3	.80
- "	66	66	66		4	.85
66	66	4.6	6.6		5	.95
66	64	6.6	66		6	1.10
4.6	6.6	6.6	4.6		7	1.25
6.6	66	6.6	6.6		8	1.30
No	shoe	s drille	ed oth	er tha	n regular.	

NEVERSLIP TAPS AND CALKS.

A PATTERN DRILLED

Nos		 	 	 . 6	7	8
Holes drilled	for	 	 	 . 5/8	5/8	5/8

B PATTERN DRILLED

Nos		0	1	2	3	4	5
Holes drilled	for	3/8	3/8	7	7	1/2	9 16

STEEL HIND PATTERN-DRILLED.

CAN'T SLIP CALKS.



Sizes, inches . . $\frac{3}{8}$ $\frac{7}{6}$ $\frac{7}{2}$ $\frac{7}{6}$ $\frac{5}{8}$ Net price, 100...\$2.00 2.00 2.00 2.00 2.00

HORSE SHOE PADS. Made by Reserve Rubber Company,

GLOBE.



							7	ě	××	X	W	***	QQ	χo	×	8	7									
								C	aı	n	va	ıs		В	ac	k	:.					_				
Sizes	,																					Ŋ			price r pair	
No.																									-	
No.																										
No.		м		•	м	-		•			•		-		•	•	-	• •	•			-		•	.88	
No.	5																								1.00	
No.	6	•	 ٠	٠	•	٠.	•	٠	٠.	٠	٠			٠	٠				٠	•	•	 ٠	•	•	1.20)

IDEAL.



					Ι	. 6	a	ti	h	eı	r]	Ва	ac	k							N	Į,	et	price
Sizes																									er pair
No. 1														٠.											\$0.90
No. 2																									.90
No. 3																		ı			ı	ı	ı		.90
No. 4		ì	ì					i		ì	ì	ì			i	Ì			Ì	i	ì	Ĺ	Ì	Ĭ	.90
No. 5																									
No. 6																									
Note																						•	Ĭ	ľ	2.00

ACME.

Note.—This is an open pad for general use.



Ca	13372	- TO	1	

G.																				iç	
Size	_																•		•	ai	
No.	1																	\$0	١.	6	5
No.	2																			6	5
No.	3																			6	5
No.	4																			6	5
No.	5																			7	5

SARATOGA.



White Rubber Leather Back.

		0															N	Je	et	p	r	ic	e
Size	S																					ai	
No.	1																			\$(ĵ.	9	0
No.																							
No.	3																					9	0
No.	4								١.													9	0
No.	5																			1	L.	0	5

AIR CUSHION ROAD.



Leather Back.

																														N	Īε	et	pri	ce
Sizes	S														•																p	e	er pa	air
No.	21/2	ź																															\$0.	95
No.	3																																	95
No.	31/2	2					٠		٠	٠	٠	•	•	٠	٠				٠															95
No.	4	;					٠	٠	٠			٠	٠	٠	•	•	•	٠							•	•		٠						95
No.	4 1/2	2	•	٠	•	٠	٠	٠	٠	٠	٠	٠	٠	٠	٠	٠	٠	٠	٠	٠	•	٠	٠	٠	۰	٠	٠	•	٠	٠	•	۰	1.	10

Note.—This pad is made for light driving being not so wide as the regular air cushions.

AIR CUSHION REGULAR.



]	L	e	a	tl	10	21	r]	B	a	c1	k.				1	V	et	t 1	рı	ic	e	
Sizes																							1	ρe	er	Ţ	ai	r	
No.	1																								\$	o	.9	5	
No.	2				į.																				ľ		.9	5	
No.																													
No.																													
No.	5																						ı			1	.2	0	
No.																													
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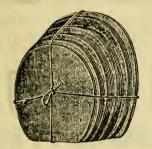
step, breaking concussions, used in cases of hoof lameness.

HORSE SHOE PADS.

DAVIE RUBBER PAD. .



FRONTS ONLY.



SOLE LEATHER-Extra Good Stock.

	Net price	Net price
	per pair	per pair
No. 1	\$0.11	No. 4\$0.17
No. 2		No. 5
No. 3		No. 6

RUBBER PAD SHOE.

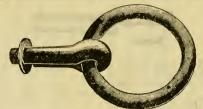


	Net price	1	Net price
Sizes	per set	Sizes	per set
No. 1	\$1.80		\$2.60
No. 2	2.00	No. 5	3.00
No. 3	2.30	No. 6	3,25
	,		

Pairs at one-half set price.

The W. & B. Rubber Shoe consists of a forged steel frame with uneven surface, both top and bottom, over which is firmly vulcanized a cushion of rubber which fills a channel on the under side, swelling out at the inside of the heels, forming solid rubber pads which give frog pressure, prevent slipping, fitting cold and will wear as long as an ordinary shoe under the same conditions.

HAME BREAST RINGS AND STUDS.



No. 965 Polished with burrs.....\$0.32 \$0.04

GRAY IRON BREAST STRAP SLIDES.



No. 47 Japanned. Sizes in stock . G-1½ in. J-1½ in. L-1¾ in. Net price per doz. \$0.36 \$0.36 \$0.41 Net price cach. . 04 .04 .05

WROUGHT IRON BITS.



No. 47 Steel Mouth.

Net price per doz. 234 in. Ring and C. Plate Stiff Mouth...\$0.60 234 in. Ring and C. Plate Jointed Mouth ...60

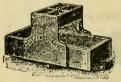
Net price each 234 in Ring and C. Plate Stiff Mouth...\$0.07 234 in. Ring and C. Plate Jointed Mouth .07

HAME LINE RINGS AND STUDS.



No. 964 Polished with burrs.....\$0.25 \$0.03

LITTLE GIANT FARRIER'S TOOL BOX.



Made of thoroughly well seasoned stock, lock cornered, mortised bottom and side pieces, finely finished and thoroughly made in every respect. This case, proper-

every respect.
This case, properly used, will last a horseshoer very much longer than those commonly in use. A cheap, strong, durable box for Horseshoers' Tools.

Net price each \$1.75

Si N

HAME CLIPS, STAPLES AND RIVETS.



	Ne	t price each.	per doz.
Hame	Clips, 2 hole, 3/8	inch\$0.02	\$0.20
Hame	Clips, 3 hole, 3/8	inch03	.28
Hame	Clips, 3 hole, 78	inch04	.38
		t price each.	per doz.
Hame	Staples, 3% inch.		\$0.20
Hame	Staples, 7 inch.	03	.26
			ce per 1b.
Hame	Rivets, 7/8 inch		
Hame	Rivets, 1 inch	1	10

TRACE DEES.



Size, inche	es 1½	13/4	2	21/4	21/2
Net price,	doz\$0.50	.55	.65	.70	.75
Net price,	each05	.06	.07	.08	.09

REPAIR LINKS.



Sizes in stock, inches,	4 18	3/8	7 16	E 1/2
Price per dozen\$0.2	32 .32	.43	.00	.70
Price, each	02 .03	.04	. 05	.07

All that is necessary in order to repair a broken chain is to open the link, hook the chain in each end of link and then close the link. No pounding or hammering.

SCREW COCKEYES.



Size, inches 1½	13/4 2
Net price, per doz\$0.2	5 .30 .40
Net price, each	3 .04 .05

CLIP COCKEYES.



With Wrought Iron Clips.

Net price	Net price
each	per doz.
\$0.05	\$0.40

UTILITY COCKEYES.



						_	200	-			
izes	incl	ıes	 							13/4	2
										\$0.50	.75
										.06	

GERMAN HARNESS SNAPS.



Sizes, inches ... 5% 34 7% 1 11/4 11/2 13/4 2

Net price, doz. ... \$0.15 .15 .15 .15 .26 .34 .44 .50 each02 .02 .02 .02 .03 .04 .05 .06

DIXIE BOLT SNAPS.





No. 425.

Sizes, inches ... 34 1 11/4 11/2 13/4 2
Net price, doz... .\$0.25 .30 .35 .40 .45 .50
Net price, each03 .04 .04 .05 .05 .06

BREAST STRAP ROLLER BOLT SNAPS.



 No. 439.

 Size, inches
 134

 Net price, per doz
 \$1.50

 Net price, each
 14

OPEN EYE SNAPS.



SNAP AND THIMBLE.



		400			
Siz	es				Net price each
1/2	inch	Thimble,	5/8	inch	Snap\$0.10
1/2	inch	Thimble,	3/4	inch	Snap
Siz	es				Net price per doz.
1/2	inch	Thimble,	5/8	inch	Snap\$0.80
1/2	inch	Thimble,	3/4	inch	Snap



STUMP JOINT RIVETS.

BEVEL HEADS.

		ice per
Size		100
1/4 in.	diam.\$0.12	\$0.90

WIRE CLINCHING NAILS.

Sizes	Net price per paper
4-8 and shorter	\$0.05
41/2-8 and longer	

OVAL HEAD AND WAGON BOX RIVETS.

Oval Head.	Wagon Box Head.
Sizes in Stock from	Net price per 1b.
½ in. to 4 in. x 3 in.	Oval or Wagon\$0.06
34 in. to 4 in. x 1/4 in. Box Head	Oval or Wagon

BOW SOCKET AND WHEEL RIVETS.





Bow	Socket.	Wheel H	Iead.
All sizes, n	et price per	1b	\$0.071/2

BLACKSMITHS' APRON.



Leather.

Sizes	Net price each
	28x38 in\$1.60 26x24 in 1.50

Sheep Skin.

Sizes]	N	e	t	I)1	i	ce	each
No.	ι.									. 5	1.30
No. 5											

WIRE BRADS.

◆ せいたけんれるのはかから

In 1-pound papers.

	Net price		Net price		
Size	per paper	Size	per paper		
	No. 17\$0.10	11/2 in. No.	14\$0.06		
3/4 in.	No. 1811	11/2 in. No.	1507		
7/8 in.	No. 1709	134 in. No.	1306		
7/8 in.	No. 1809	134 in. No.	1406		
1 in.	No. 1608	2 in. No.	1206		
1 in.	No. 1708	2 in. No.	1306		
11/4 in.	No. 1407	21/2 in. No.	1106		
11/4 in.	No. 1507	21/2 in. No.	1206		

WOOD SCREWS.

miles									
	Net	price				Net	price		
Sizes	per	gross	Size	S			gross		
1/4 in.		\$0.11	11/4	in.	No.	11	0.21		
3/8 in.	No. 3	.11		in.	No.	12	.23		
3/8 in.	No. 4	.11	11/4	in.	No.	13	.26		
3/8 in.	No. 5	.12	11/4	in.	No.	14	.29		
		.12	11/4	in.	No.	15	.32		
3/8 in.	No. 6	.13	174	in.	No.	16	.38		
3/8 in.	No. 7		11/4				.50		
3/8 in.	No. 8	.13	11/4	in.	No.	18			
1/2 in.	No. 2	.11	11/2	in.	No.	7	.18		
½ in.	No. 3	.11	1 1/2	in.	No.	8	.20		
½ in.	No. 4	.11	1 1/2	in.	No.	9	.21		
1/2 in.	No. 5	.12	1 1/2	in.		10	.21		
½ in.	No. 6	.12	11/2	in.	No.	12	.25		
½ in.	No. 7	.13	11/2	in.	No.	13	.27		
5/8 in.	No. 3	.11	11/2	in.	No.	14	.30		
5% in.	No. 4	.11	11/2		No.	15	.35		
5/8 in.	No. 5	.12	11/2	in.	No.	16	.42		
5/8 in.	No. 6	.12	134	in.	No.	8	.23		
9/8 111.	No. 7	.13	134	in.	No.	9	.24		
5/8 in. 5/8 in.		.14			No.	10	.24		
5/8 in.	No. 8	.14	134	in.	No.	10	.27		
3/4 in.	No. 4	.11	134	in.		12			
3/4 in.	No. 5	.12	13/4	in.		13	.30		
3/4 in.	No. 6	.13	134	in.	No.	14	.34		
3/4 in.	No. 7	.14	13/4	in.	No.	15	.39		
3/4 in.	No. 8	.14	134	in.	No.	16	.45		
3/4 in.	No. 9	.15	2	in.		9	.25		
3/4 in.	No. 10	.17	2	in.	No.	10	.27		
7/8 in.	No. 5	.13	2	in.	No.	11	.28		
7/8 in.	No. 6	.14	2	in.	No.	12	.30		
% in.	No. 7	.14	2	in.	No.	14	.37		
7/8 in.	No. 8	.15	2	in.	No.	16	.47		
7% in.	No. 9	.16	2	in.	No.	18	.63		
78 in.	No. 10	.17	91/	in.	No.	11	.31		
1 in.	No. 5	.13	91/	in.	No.	12	.33		
	No. 6	.14	21/	in.	No.	14	.40		
1 in.		.15	2 1/4 2 1/4 2 1/4 2 1/2 2 1/2 2 1/2	in.	No.	15	.47		
1 in.	No. 7		01/	in.	No.	11	.38		
1 in.	No. 8	.16	91/	in.	No.	12	.39		
1 in.	No. 9	.17	07/2						
1 in.	No. 10	.18	2 1/2 2 1/2	in.	No.	13	.41		
1 in.	No. 11	.20	2 1/2	in.	No.	14	.44		
1 in.	No. 12	.21	21/2 21/2	in.	No.	15	.50		
1 in.	No. 13	.24	21/2	in.	No.	16	.55		
1 in.	No. 14	.26	3	in.	No.	14	.53		
11/4 in.	No. 7	.17	3	in.	No.	16	.63		
11/4 in.	No. 8	.17	3	in.	No.	18	.83		
11/4 in.	No. 9	.18	4	in.	No.	16	.98		
1¼ in. 1¼ in.	No. 10	.20	4	in.	No.	18	1.14		
			41/2	in.	No.	18	1.37		

SILO LUGS

	LOL	Round	Tron Troops.	
Sizes			Net price each	Ĺ
5/8 inch			\$0.10)
3/4 inch				,

LAFFITTE WELDING PLATES.



LOWER YOUR COSTS-IMPROVE YOUR WORK.

These plates are used in the simplest pos-These plates are used in the simplest pos-sible manner, the two pieces being heated to a cherry red if steel, or a white heat if iron. A piece of Laffitte Plate of sufficient size is then placed between the parts to be welded, then press them together until the Plate fuses, hammer tightly and complete by hammering in the usual way. The piece may be reheated to any desired heat without endangering the weld.

Each ...\$0.12

Net price per box \$1.00 1.25



Guaranteed equal to Borax, and superior to many welding compounds. Will work on iron or steel. PRICE ABOUT ONE-HALF. TRY A SAMPLE.

mon borax.

CHERRY HEAT WELDING COMPOUND.



Note-This Compound is regularly used by thousands of Carriage Makers, Knife and Shear Manufacturers, Machinists, Manufac-turers of Shovels, a n d Agricultural Implements, etc., all

over the United

Net price, per 5 lbs.....

CLIMAX WELDING COMPOUND.





It does not have to be applied between the lap, like other compounds, but is used the same as borax. It is also far superior to com-

Net price per 1 lb.....\$0.12

REFINED BORAX.



Net	price	per	1	lb								. :	\$0	1:	T
Net	price	ner	ă	lbs.										5(0

COMMON CARRIAGE BOLTS.

Full Size Shank.



Cut Threads.

		18	& 1/4	in.		16			3/8			76			1/2	
		Price	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price.	Price	Price
I	gth	.Each		100	Each		100	Each	Doz.	100	Each		100	Each		100
	1	\$0.01					\$0.36	\$0.01	\$0.10	\$0.49	\$0.02	\$0.15	\$0.75	\$	\$	\$
	11/4	.01	.05	.25		.07	.36	.01	.10	.49						Ψ
	11/2	.01	.05	.25	.01	.07	.36	.01	.10	.49	.02	.15	.75	.02	.15	1.03
	13/4	.01	.05	.26	.01	.07	.37	.01	.10	.51		•••				
	2 74	.01	.05	.27	.01	.07	.38	.01	.10	,52	.02	.15	.81	.02	.15	1.02
	21/4						.39	.02	.15	.54						1.03
		.01	.05	.28	.01	.08			.15	.56	.02	.15	077		11.5	7 00
	21/2	.01	.05	.29	.01	.08	.41	.02	.15	.58			.87	.02	.15	1.03
	23/4	.01	.05	.30	.01	.08	.42	.02				***	***	• • •	***	***
	3	.01	.06	.32	.01	.09	.44	.02	.15	.60	.02	.20	.94	.02	.20	1.09
	31/4	.01	.06	.33	.01	.09	.45	.02	.15	.62		• • • •				
	31/2	.01	.06	.34	.01	.09	.47	.02	.15	.65	.02	.20	1.00	.02	.20	1.18
	33/4	.01	.06	.35	.01	.09	.49	.02	.15	.67						
	4	.01	.07	.35	.01	$\frac{1}{2}$.10	.51	.02	.15	.69	.02	.20	1.06	.03	.25	1.25
	41/4	.01	.07	.36	.01	1/2 .10	.53	.02	.15	.71						
	4 1/2	.01	.07	.37	.01	1/2 .10	.55	.02	.15	.74	.02	.20	1.12	.03	.25	1.33
	43/4	.01	.07	.38	.01	1/2 .10	.56	.02	.15	.77						
	5	.01	.08	.39	.02	.15	.57	.02	.15	.79	.02	.20	1.18	.03	.25	1.40
	51/4	.01	.08	.40	.02	.15	.58	.02	.15	.81					•••	
	51/2	.01	.08	.41	.02	.15	.59	.02	.15	.82	.03	.25	1.25	.03	.25	1.48
	53/4	.01	.08	.42	.02	.15	.61	.02	.15	.84						
	6	.01	.08	.43	.02	.15	.63	.02	.15	.85	.03	.25	1.31	.04	.30	1.55
	61/2				.02	.15	.66	.02	.20	1.15	.03	.25	1.37			1.62
	7^{2}				.02	.15	.69	.02	.20	1.21	.03	.25	1.43	.04	.30	1.70
	71/2				.02	.15	.72	.03	.25	1.26				.04	.30	1.78
	8	• • •			.02	.15	.75	.03	.25	1.32			• • •	.04	.30	1.86
	81/2	• • •	• • • •					.03	.25	1.37			• • •	.04		1.93
															.35	
	9	• • • •	. ***			• • •		.03	.25	1.42	• • •			.04	.35	2.00
	91/2	• • •						.03	.25	1.47				.04	.35	2.08
1								.03	.25	1.53				.04	.35	2.16
	01/2							• • •	• • •	• • •				.05	.40	2.23
1														.05	.40	2.30
	$1\frac{1}{2}$.05	.40	2.38
1														.05	.45	2.45
1	21/2													.05	.45	2.53
1	3													.05	.45	2.61
1	31/2													.05	.50	2.68
1	4													.05	.50	2.75
1	4 1/2													.05	.50	2.83
î														.05	.50	2.91
^									in a			in.		ger 50		pack-
0									na lace						u	Puon

Note.— $\frac{7}{16}$ and $\frac{1}{4}$ in. bolts are packed 100 in a package. $\frac{7}{16}$ in. and larger 50 in a package. We keep cut thread bolts only. Nothing less than a package at 100 price.

PHILADELPHIA CARRIAGE BOLTS.

Oval Turned Heads. Full Square Necks.



Hot Forged Nuts and Cut Threads.

		16 0 14			16			3/8	
	Price	Price	Price	Price	Price	Price	Price	Price	Price
Lgth.	Each	Doz.	100	Each	Doz.	100	Each	Doz.	100
1	\$0.02	\$0.15	\$0.68	\$0.02	\$0.18	\$0.88	\$0.02	\$0.20	\$1.19
11/4	.02	.15	.70	.02	.18	.89	.02	.20	1.20
1 1/2	.02	.15	.72	.02	18	.90	.02	.20	1.21
1 3/4	.02	.15	.75	.02	.18	.91	.02	.20	1.22
2	.02	.15	.77	.02	.18	.93	.02	.20	1.23
21/4	.02	.15	.79	.02	.18	.95	.03	.25	1.26
21/2	.02	.15	.81	.02	.18	.99	.03	.25	1.31
23/4	.02	.15	.84	.02	.18	1.02	.03	.25	1.35
3	.02	.18	.86	.03	.20	1.06	.03	.25	1.40
31/4	.02	.18	.88	.03	.20	1.11	.03	.25	1.46
31/2	.02	.18	.90	.03	.20	1.13	.03	.25	1.51
			.93	.03					
3 3/4	.02	.18			.20	1.17	.03	.25	1.55
4	.02	.18	.95	.03	.20	1.20	.04	.30	1.60
4 1/2	.02	.18	1.02	.03	.25	1.29	.04	.30	1.70
5	.03	.20	1.08	.03	.25	1.35	.04	.30	1.78
$5\frac{1}{2}$.03	.25	1.42	.04	.35	1.89
6				.03	.25	1.49	.04	.35	1.98

NORTH CARRIAGE BOLTS.



Corrugated Neck.

Net price per 100.

Length.	ş	8 44	.5 16		3/8
1 to 11/2		\$0.26	\$0.37		\$0.51
134		.27	.37		.54
2		.28	.40		.54
21/4		.30	.42		.56
21/2		.31	.43		.58
23/4		.32	.44		.61
3		.33	.46		.63
31/4		.34	.48		.67
31/2		.36	.49		.69
33/4		.37	.52		.72
4		.38	.54		.74
4 1/4		.39	.56		.75
4 1/2		.40	.58		.79
4 3/4		.41	.59		.82
5		.42	.60		.84
51/2		.43	.63		.86
6		.46	.66		.91
North	Carriage	Bolts have	ribbed	on	Corru-

gated Neck.
We do not break packages of above bolts.

CONE HEAD SPRING BAR

BOLTS.



STEEPLE HEAD SPRING BAR

BOLTS.



SLEIGH SHOE BOLTS.



a.		Net	price
Sizes.		per doz.	per 100.
3/8×4	inch	 \$0.10	\$0.77
			.82
3∕8×5	inch	 10	.86
3/8 x 5 1/2	inch	 12	.91
3/8×6		12	.95
3/8×6½		 15	1.26
3/8 x7			1.31
38x71/2	inch	 18	1.38

COMMON TIRE BOLTS.



	,	3.		4	18		
	Price	Price	Price	Price	Price	Price	
Lgth.	doz.	100.	doz.	100.	· doz.	100.	
11/4	\$0.03	\$0.12	\$0.04	\$0.22	\$0.05	\$0.32	
11/2	.03	.12	.04	.22	.05	.32	
134	.03	.12	.04	.23	.05	.32	
2	.03	.14	.04	.24	.05	.33	
21/4	.04	.15	.04	.25	.05	.34	
21/2	.04	.17	.05	.26	.05	.36	
23/4	.04	.17	.05	.27	.05	.38	
3		.18	.05	.28	.06	.40	
31/4			.05	.29	.06	.41	
31/2			.05	.30	.06	.42	
33/4			.05	.31	.06	.44	
4			.05	.32	.06	.46	
4 1/4						.48	
4 1/2						.50	

"T" HEAD SHAFT AND WHIFFLE-TREE BOLTS.



Net price per 100.

Length.	3	1/4	.5 16	3/8
11/4	\$1.25	\$1.25	\$2.50	\$2.75
11/2	1.25	1.25	2.50	2.75
13/4	1.25	1.25	2.50	2.75
2	1.25	1.25	2.50	2.75
21/4	1.25	1.25	2.50	2.75
21/2			2.50	2.75
3			2.50	2.75
31/2			2.50	2.75
4			2.50	2.75
4 1/4			2.50	2.75
			Net price	
	¼ inch			
16 and	3/8 inch			22c

BOLT ENDS.



Sizes ½ 56 34 76 1 1½ 1¼ 1¼ 1¾ 1½ Length .. 8 9 10 11 12 13 14 15 16 Net price each ... 2½ 4 5 7½ 11 15 22 35 37

SHAFT SHACKLE BOLTS.



Sizes.			Net price	
3/8 x 2 1/4	inch	 		20c
7 x2 1/2	inch	 		20c

Square Head.



Cut Thread.

		1/4			16	
	Price	Price	Price	Price	Price	Price
Lot	h. Each		100	Each	Doz.	100
1	\$0.01	\$0.08	\$0.41	\$0.01	\$0.09	\$0.49
11/2	.01	.08	.41	.01	.09	.49
2	.01	.08	.43	.01	.10	.51
21/2	.01	.09	.45	.01	.10	.54
3	.01	.09	.47	.01	.10	.56
31/2	.01	.09	.49	.02	.15	.60
4	.01	.10	.51	.02	.15	.63
41/2	.02	.15	.65	.02	.15	.81
5	.02	.15	.68	.02	.15	.85
	.02	.15	.71	.02	.20	.89
51/2		.15	.75	.02	.20	.93
6	. 02		.10	.02		.00
		3/8			1/2	
1	\$0.02	\$0.15	\$0.58	\$	\$	\$
11/2	.02	.15	.58	.02	.20	1.19
2	.02	.15	.62	.03	.25	1.27
21/2	.02	.15	.66	.03	.25	1.36
3	.02	.15	.70	.03	.25	1.41
31/2	.02	.15	.74	.04	.30	1.58
4	.02	.15	.78	.04	.30	1.62
4 1/2	.02	.20	1.11	.04	.30	1.71
5	.02	.20	1.16	.04	.30	1.79
51/2	.02	.20	1.22	.04	.30	1.83
6	.03	.25	1.24	.04	.35	1.97
61/2	.03	.25	1.32	.04	.35	2.05
7	.03	.25	1.37	.05	.40	2.14
71/2	.03	.25	1.41	.05	.40	2.23
8	.03	.25	1.48	05	.40	2.31
81/2				.05	.40	2.40
9				.05	.45	2.49
91/2				.05	.45	2.58
10				.05	.45	2.66
101/2				.05	.50	2.75
11				.05	.50	2.83
111/2	• • • •	• • • •		.05	.50	2.92
12				.05	.50	3.01
13		• • • • •		.05	.50	3.18
14	• • • •			.06	.55	3.35
15	• • •	•.• •		.06	.55	3.53
	• • • •	••••				
Tı	nacka	ges of	50. No	thing le	ss than	Dack-

In packages of 50. Nothing less than package at 100 price.

COACH SCREWS.

		5/8			3/4	
	Price	Price	Price	Price	Price	Price
Lgth	.Each	Doz.	100	Each	Doz.	100
1 \$	3	\$	\$	\$	\$	\$
11/2	.04	.30	1.72			V
2	.04	.30	1.85	.05	.45	2.55
21/2	.04	.35	1.97	.05	.50	2.73
3	.04	.35	2.10	.05	.50	2.89
31/2	.05	.40	2.23	.05	.50	3.05
4	.05	.40	2.35	.06	.55	3.23
4 1/2	.05	.45	2.48	.06	.55	3.39
5	.05	.45	2.61	.06	.55	3.56
$5\frac{1}{2}$.05	.50	2.73	.06	.60	3.73
6	.05	.50	2.87	.06	.60	3.89
$6\frac{1}{2}$.05	.50	2.99	.06	.60	4.05
7	.05	.50	3.11	.06	.60	4.23
71/2	.06	.55	3.25	.06	.60	4.39
8	.06	.55	3.37	.07	.65	4.56
81/2	.06	.55	3.50	.07	.65	4.76
9	.06	.55	3.63	.07	.65	4.89
91/2	.06	.60	3.76	.07	.70	5.06
10	.06	.60	3.88	.07	.70	5.23
101/2	.06	.60	4.01	.07	.70	5.40
11	.06	.60	4.13	.08	.75	5.56
111/2	.06	.60	4.25	.08	.75	5.73
12	.06	.60	4.36	.08	.80	5.89
13	.07	. 65	4.63	.08	.80	6.23
14	.07	.65	4.89	.08	.85	6.56
15	.07	.70	5.14	.09	.90	6.89
16	.07	.70	5.39	.09	.95	7.23
17	.08	.75	5.65	.10	1.00	7.55
18	.08	.80	5.94	.10	1.05	7.89
19	.08	.80	6.16	.11	1.10	8.43
20	.08	.85	6.40	.11	1.10	8.55

In packages of 50. Nothing less than package at 100 price.

COACH SCREWS.

Square Head.



Gimlet Point. Square Head-Gimlet Point. 5/8 3/4 3/8 Price Doz. Each Lgth. Each \$0.18 \$0.90 \$.... \$.... \$.... \$0.01 \$0.10 \$0.02 \$0.66 \$0.02 \$.... \$.... 11/2 \$0.55 \$0.15 .99 .18 .72 .02 2 .01 .10 .56 .02 .15 ... 21/2 .02 .62 .78 .02 .20 1.06 .02 .15 .1503 1.42 .02 .20 1.15 .25 3 .02 .15 .68 .02 .15 .85 ... 1.22 31/2 .15 .20 .89 .02 .20 .04 .30 1.54 .02 .74 .0203 .20 .94 .25 1.32 .04 .30 1.66 .02 .15 .77 .0225 .02 .15 .83 .02 .20 1.01 .03 1.40 .04 .30 1.78 41/2 .04 1.50 .20 1.09 .30 .04 .30 1.89 .05 .50 2.70 5 .02 .20 .87 .02 2.89 .02 .30 1.57 .04 .35 .05 .50 51/2 .20 .93 .02 .20 1.13 .04 2.06 .02 .20 1.19 .04 .30 1.69 .04 .35 2.13 .05 .50 3.03 6 .02 .20 .98 2.27 .30 1.74 .05 .06 3.22 61/2 .04 .4030 1.85 .05 2.37 .06 .55 3,37 .04 .40 704 .35 1.91 .05 2.50 .06 .55 3.56 71/2 .4535 .05 2.61 .06 .60 3.70 .04 2.02 .45 840 2.11 .05 .50 2.73 .60 3.87 .06 81/2 .0505 .40 2.17 .05 .50 2.84 .06 .60 4.03 905 2.27 .05 2.97 .06 .60 4.20 .40 .50 91/240 2.33 .05 .50 3.08 .06 .60 4.36 .05 1045 2.44 .06 .55 3.20 .07 .65 4.54 .05 101/205 .45 2.51 .06 .55 3.33 .07 .65 4.70 1105 .45 .07 2.61 .06 .55 3.44 .65 4.88 111/2 3.56 .07 .70 5.03 .05 .45 2.70 .06 12 ...

SKEIN SCREWS.

12 inch, per set of 4....\$0.09 14 inch, in set of 4.....\$0.16 15% inch, per set of 4..... 12

DASH BOLTS.



Concealed Head.

Sizes.	Net	price	per doz.
11/4 x 16	inch .	• • • • •	\$0.25

BASTARD HEAD BOLTS.



	Net	price pe	r 100.
Length.	3 16	1/4	16
1	\$0.66	\$0.66	\$0.88
1:1/4	.68	.68	.88
11/2	.70	.70	.88
134	.73	.73	.88
2	.75	.75	.90
21/4	.77	.77	.92
21/2	.79	.79	.96
23/4	.81	.81	.99
3	.84	.84	1.02
0	*0±	.01	2.00

SPRING BOLTS.



Sizes.	Net price pe	r doz.
2 X 16		.\$0.18

STOVE BOLTS.



Flat Head.

Net price per 100.

Length.	3	1/4	7 ⁵ 6
1/2	\$0.15	\$0.22	
1/2 5/8 3/4	.15	.22	
3/4	.15	.22	\$0.31
7/8	.16	.23	.31
1	.16	.23	.33
11/4	.18	.25	.35
11/2	.20	.27	.37
13/4	.21	.28	.39
2	.22	.29	.41
21/4	.29	.35	.44
2 1/2	.32	.38	.50
23/4	.35	.45	.55
3	. 40	.50	. 67

STOVE BOLTS.



Round Head. Net price per 100.

710	L price	per roo	•
Length.		1/4	1 ⁵ 6
1/2	\$0.16		
5/8	.16		
3/1	.16	\$0.23	\$0.32
3/4 7/8	.17	.24	.33
1	.17	.24	.34
11/4	.19	.24	.36
11/2	.21	.28	.38
134	.22	.29	.40
2	.23	.30	.42
21/4	.27	.35	.49
21/2	.32	.40	.54
23/4	.36	.45	.60
3 94	.40	.50	,65
0	. 10	.00	, 00

WROUGHT IRON TURN BUCKLES.



With Right and Left Hand Stub Bolt Ends Net price each.

Sizes	i.	Net price cach	•
1/2	inch	\$0.25	3
5/6	inch		4
	inch		0
74	inch		6
_ 1/8			9
11/8	inch		
11/4	inch		
13/8	inch		U
, 0			

WROUGHT WASHERS.



Size	s for	Net price per lb.
3	inch	Bolt\$0.10
1/4	inch	Bolt
.5.	inch	Bolt
3/6	inch	Bolt
7/6	inch	Bolt
		Bolt
		Bolt
		201010101010
		Bolt
1	inch	Bolt

TIRE BOLT WASHERS.





% inch. 1/4 inch.
Size. Net price per 1b.
% inch\$0.10

SQUARE NUTS.



Size	s for	Net pric	e per 1b.
1/4	inch	Bolt	\$0.09 1/2
18	inch	Bolt	.08
3/8	inch	Bolt	.06
7	inch	Bolt	.05 1/2
		Bolt	
9	inch	Bolt	.04 1/2
3/6	inch	Bolt	.04
3/1	inch	Bolt	.04
7/6	inch	Bolt	.04
1 8		Bolt	
-	11.CII	Dominion	

HEXAGON NUTS.



Size	s for		N	et pi	rice	per 1b.
5 16	inch	Bol	lt		\$	0.12
3/8	inch	Bo	lt			.10
	inch					.081/2
	inch					.071/2
16	inch	Bo	lt			.07 1/2
5/8	inch	Bo	lt			$.06\frac{1}{2}$
3/4	inch	Во	lt			.051/2
7/8	inch	Во	lt			$.05\frac{1}{2}$
1	inch	Bo	lt			.05 1/2

TAPPED SQUARE NUTS.



	Net price	
1/4 inch	Bolt \$	$0.12\frac{1}{2}$
5 inch	Bolt	.111/2
3/8 inch	Bolt	.09
7 inch	Bolt	.08
1/2 inch	Bolt	.061/2
5/s inch	Bolt	.06
	Bolt	.05
	Bolt	.05
	Bolt	.05

CAST IRON WASHERS.



Sizes for 58, 34, 78 and 1 inch diameter\$0.04

DOUBLE ENDER FILES.

- crea

	Net price	Net price
Sizes.	each. doz.	Sizes. each. doz.
No. 7	.\$0.08 \$0.84	No. 9\$0.10 \$1.05
No. 8	09 .94	No. 1012 1.16

SLIM TAPER FILES.

Net price Net price Sizes. Sizes. each. doz. doz. each. inch ..\$0.05 \$0.51 \$0.76 6 inch...\$0.09 31/2 inch .. .05 .51 7 inch... .10 .91 .06 inch .. 4 .53 8 inch... .12 1.08 41/2 inch .. .06 .57 inch .. .62 .07 51/2 inch70

REGULAR TAPER FILES.

.08

.06

.07

.08

4½ inch ...

5½ inch ..

5

inch ..

6 inch12

8 inch

		Net	price		Net	price
Size	s.	Net each.	doz.	Sizes.	each.	doz.
3	inch	\$0.05	\$0.51	6 inch.	.\$0.09	\$0.81
31/2	inch	05	.51	7 inch.	10	1.03
4	inch	06	.53	8 inch.	12	1.30

.72 MILL BASTARD FILES.

.57

.60

9 inch..

10 inch..

.15

.20

1.57

1.52

2.31

3.16

4.23

.30

	ea \$0	ch. .08 .09	doz. \$0.80 .88 1.03	Sizes. 10 inch. 12 inch. 14 inch. 16 inch.	each. .\$0.14 18	doz. \$1.33

FLAT BASTARD FILES.



14 inch..

1.27 | 16 inch...

1.03 ROUND BASTARD FILES.

O WELLES THE THE HOLD HOLD HELD WAS THE TOWN THE

.15

	Net	price	1	Net	price
Sizes.	Net each.	doz.	Sizes.	each.	doz.
4 inch	\$0.07	\$0.72	10 inch.	.\$0.14	\$1.33
5 inch	08	.76	12 inch.	18	1.75
	08	.84	14 inch.	25	2.30
8 inch		1.03	16 inch.	30	3.50

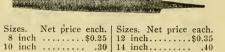
SQUARE BASTARD FILES.

	Net	price		Net	price
Sizes.	Net each.	doz.	Sizes.	each.	doz.
4 inch	\$0.10	\$0.95	10 inch.	.\$0.17	\$1.76
5 inch	10	1.00	12 inch.	23	2.43
6 inch	12	1.15	14 inch.	35	3.31
8 inch	13	1.38	16 inch.	40	4.45

HALF ROUND BASTARD FILES.

	Sugar And	
Sizes.	Net price each. doz.	Net price Sizes. each. doz. 12 inch\$0.27 \$2.70
8 inch	20 1.80	12 inch\$0.27 \$2.70 14 inch25 3.50 16 inch45 4.70

FLAT WOOD RASPS.



HALF ROUND WOOD RASPS.

8 inch	each. Sizes. Net price each. \$0.25 12 inch \$0.36		

THE "PEELER" RASP.



For Horseshoers and Wagonmakers. The only radical improvement in tools for shoeing horses in 100 years.

Of saw steel, with interchangeable cutting plates, which may be resharpened as many times as a saw. The teeth are gouge-shaped and make a clean, continuous cut without clogging. Superior to all other tools used for the purpose, as regards ease, safety and durability.

Sizes	5.	Net	t p	rice	each.
One	"Peeler" rasp and file				\$0.75
New	plates				.35
File	for sharpening the plates.				.15

HORSE RASPS.

X (X)	******	CA 22	A 16 18	30
CC	RRY	RA	SPS	

Sizes.	Net price per doz.	Price each.
14 inch	\$2.80	\$0.25
	3.25	.30
	slim 4.40	.40
	-A good Rasp.	

BARLOW RASPS.

	Plain.		
	Net price	Price	Each
Sizes.	per doz.	Plain.	Tanged.
	\$3.60	\$0.35	\$0.45
15 inch	4.25	.40	.50
	4.75	.45	.55
18 inch s	lim 4.75	.45	
	-Equal to any made.		

HELLER & BROS. HORSE RASPS.

	Net price	Price Each
Sizes.	per doz.	Plain. Tanged. \$0.45 \$0.55
15 inch	1 5.35	.50 .60
16 inch	6.25	.55 .65

BLACK DIAMOND. Plain

	Net price	Price	Each
Sizes.	per doz.		Tanged.
	\$5.25	\$0.45	\$0.55
15 inch	5.75	.50	.60
16 inch	6.35	.55	.65

SPRING COTTERS.



Net price per box. Sizes. 1/8 to 1/6 diam. by 11/4 to 21/2 in. long....\$0.42 Assorted 100 in a box.

HORSE TOOTH RASPS.





	No. 4.	
Heller Bros	s. Adjustable	Jointed.
Net price each .		\$1.05
Extra floats		

INCISOR TOOTH FILE.



Net price each.\$0.35 10 inches long

BENT INCISOR TOOTH FILE.

Quarter Rasp, 13 inches long.....\$0.50



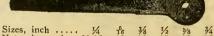
HELLER'S PRITCHELS.



Net price each. Length 12 inches\$0.17 HELLER'S SOLE KNIVES.

Net price each\$0.28

HEADING TOOLS.



Sizes, inch 1/4 1/6 Net price each ..\$0.15 .15

HAND COLD CHISELS.



Sizes, inch 3/8 Net price each..\$0.10

PLOW ANVILS. ROUND FLATTERS



PLOW ANVILS.

Sizes, lbs. Net price each\$0.45

ROUND FLATTERS.

Size, inches . Net price each\$0.30 .36 .60

COUNTERSINKS.



Net price each\$0.25

CENTER PUNCHES.



.....\$0.30 Net price each

HARDIES.



Sizes, inch shank..... \$0.28 Net price each\$0.23

HOT CUTTERS.



Sizes, inches 1½ .41 Net price each\$0.32 .33

COLD CUTTERS.



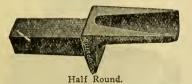
SET HAMMERS.

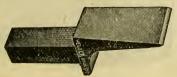


11/2 13/4 Sizes, inches 11/4 Net price each......\$0.30 .44 .60 FLATTERS.



Sizes, inches 2 2½ 2½ 2¾ Net price each...\$0.35 .42 .57 .62 .80 BLACKSMITHS' HARDIES.





Straight. Net price each. Half Round, 7/8 and 1 inch Shank\$0.44

CREASERS.



Net price each. Creasers \$0.28

FORE PUNCH.

Net price each. Fore Punches \$0.25

SQUARE PUNCH.



Sizes, inches Net price each......\$0.24 .28 .28

ROUND PUNCH.



BUFFERS.

Net price each\$0.28 TOP FULLER. BOTTOM FULLER.



Shanks % and 1 inch. | BOTTOM FULLER. | Sizes. Net price each. 1/4 inch\$0.36 .39

.39 9 inch40 5/8 inch40 .42 3/4 inch

Sizes 3/4 to 1 inch.
TOP FULLER.
Sizes. Net price each.
1/4 inch ... \$0.43
1/6 inch ... 44
1/6 inch ... 46
1/7 inch ... 46 .47 .48 72 inch 18 inch 56 inch 34 inch 78 inch 1 inch .48 .45 .50

.63

TOP SWAGE.

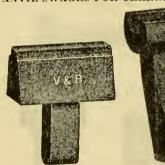


BOTTOM SWAGE.



Shank 1/8 and 1 inch.	Sizes 1/4 to 2 inch
BOTTOM SWAGES.	TOP SWAGES.
Sizes. Net price each	Sizes. Net price each
1/4 inch35c	1/4 inch30c
⁵ inch35c	5 inch32c
3/8 inch35c	3/8 inch40c
7 inch36c	1 inch41c
½ inch41c	½ inch41c
9 inch42c	9 inch41c
5% inch42c	5/8 inch41c
3/4 inch	34 inch45c
7/8 inch	7/8 inch48c
1 inch46c	1 inch48c
11/4 inch53c	1 1 inch48c
1½ inch55c	1½ inch75c

ANVIL SWAGES FOR CHANNEL TIRE.



		240 (1974)	
Size		Net	price per pair
3/4	inch		\$1.75
7/8	inch		1.75
11/4	inch		1.95
13/8	inch		2.25
11/2	inch		2.25
15/8	inch		2.60
13/4	inch		2.60

BLACKSMITHS' HAND HAMMER.



Sizes, 1bs	2	21/2	3	4	4 1/2
Net price each\$	0.25	.25	.28	.38	. 40

MASONS' HAMMER.



S	izes. Net price per 1b.
3	lbs12c
3	to 5 lbs11c
5	lbs. and over10c
	Axe finish. Each in a box.

BLACKSMITHS' SOLID STEEL SLEDGES.



Cross Pein.

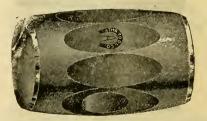
Sizes, 1bs	6 8	10	12	14	16
Net price each \$0.3					

STONE SLEDGES.



Sizes.	Net	price	per	1b.
0 40 00 11	he			. 6c

SHOERS' TURNING SLEDGES.



Octagon Pattern.

izes.	. lbs.		6	7	8	9	10
et	nrice	each \$0	.54	.63	.72	.81	.90

SPIKE MAUL.



Sizes, 1bs. 5 5½ 6
Net price each 40c 45c 50c

STRIKING HAMMER.



Size	es.										N	et	I	or	ic	е	pe	er	1b	
3 t	0 5	5	lbs.																.80	2
5 11	he		and	017	0 =														. 60	•

BLACKSMITHS' ANVILS.



From 90 to 200 lbs. in Stock.

Net price per 1b.
American Wrought Iron Steel Face 91/2c
Swedish Solid Steel 9½c
Peter Wright, Steel Face
Trenton Anvils 9½c

FARRIERS' CLIP HORN ANVILS.



From 100 to 150 lbs. in Stock.

	price	
American Wrought Iron Stee		
Trenton Clip Horn		
Peter Wright Steel Face		

Note.—Every American Anvil is made of the best American Wrought Iron and faced with best Crucible Cast Steel. Top and bottom are each one solid piece and welded at waist.

Our Swedish Solid Steel Anvils are imported direct from Sweden, and they are the finest Anvils in the world. Both our American and Swedish anvils are warranted to be sound, to be free from flaws and to have faces hard and

Our Peter Wright Anvils are imported direct from England, and are the finest Anvils in the world. We do not warrant Peter Wright Anvils

SOLID STEEL SLEDGES.



 Double Face.

 Sizes, Ibs.
 6
 8
 10
 12
 14
 16

 Net price each \$0.36
 .48
 .60
 .72
 .84
 .96

GENUINE GIANT NAIL PULLER.



LOCOMOTIVE JACK SCREW.



Diam. of Screw.	Height of Stand.	Lifting Capacity.	Net price each.
134 inch	10 inches	16 tons	\$1.70
134 inch	12 inches	16 tons	1.88
13/4 inch	14 inches	_ 16 tons	2.00
2 inch	12 inches	20 tons	2.15
2 inch	14 inches	20 tons	2.25
2 inch	16 inches	20 tons	2.65
21/4 inch	12 inches	24 tons	2.55
21/4 inch	14 inches	24 tons	2.80
2½ inch	12 inches	28 tons	3.00
2½ inch	14 inches	28 tons	3.40
2½ inch	16 inches	28 tons	3.80

BLACKSMITHS' SWAGE BLOCKS. Shipped From Factory.



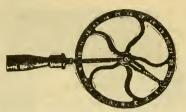


Shape of No. 1, 2 and 3. Shape of No. 4 and 5

			Ne	et price
No.	Size.	Weight	about	per lb.
1	35%x10x14	100	lbs.	\$0.03
	3%x11x15	125	lbs.	.03
	4½x11x15	145	lbs.	.03
	4 x15x15	165	lbs.	.03
	4½x18x18	255	Ibs.	.03
	6 x24x24	625	lbs.	.03

4

TIRE MEASURING WHEEL.



Net price each

Little Giant\$1.25

WOSTENHOLM'S FARRIERS KNIVES



Net price each

I. X. L. Wostenholm's Farriers' Knives. \$0.35

POPE'S FARRIER'S KNIVES.



Net price each

Iron Handle, with one blade\$0.30 Extra Blades

THE "CHAMPION" FARRIER'S KNIFE.



Net price, Handles and Three Blades...\$0.85

In presenting this knife to the trade we take pleasure in saying that it is an improvement over all other knives, having many points of superiority that will be appreciated.

Each and every blade is strictly first-class, and are made from S. & C. Wardlow's best English Cast Steel, highly tempered to hold a good and lasting cutting edge.

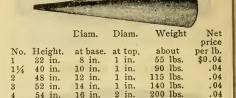
MELTING LADLES.



Sizes Net price each Net price each Sizes 5 inch Bowl...\$0.25 6 inch Bowl... 30 3 inch Bowl...\$0.12 4 inch Bowl... .14

BLACKSMITHS' MANDRELS.

Shipped from factory.



BLACKSMITHS' SLOTTED MAN-DRELS.

Shipped from factory.



Diam. Diam. Weight Net price about per lb. No. Height. at base, at top. \$0.04 1/2 60 lbs. 32 in. 8 in. 1 in. 40 in. 10 in. 1 in. 100 lbs. .04 1/2 11/2 .04 1/2 48 in. 12 in. 1 in. 125 lbs. 1 in. 150 lbs. 2 in. 220 lbs. 3 52 in. 14 in. 54 in. 16 in. .04 1/2

The Cheney Patent Blacksmith Cone or Taper Mandrel is made with a slot running nearly the whole length, as shown in cut. This is the whole length, as shown in cut. This is very convenient for holding the ends of iron in bending rings, or when a ring with an eyebolt is being made, the eye and bolt lie in this slot while the ring is being rounded up.

THE GENUINE EASY BOLT CLIPPER.



Net price each. Sizes.

 No. 0 cuts 1/8 inch or less
 \$2.00

 No. 1 cuts 3/8 inch or less
 2.50

 No. 2 cuts 1/2 inch or less
 3.50

up the wear of the joints and cutting edges. Are fitted with rubber buffers between the handles to avoid any jar in the hands and wrist. Every clipper fully warranted.

CLIPPER. ALLEN-RANDALL BOLT



,
cb.
.75
.25
.25
.00
.00
as

made.



Net price each Extra blades 15c each.

This tool is the best ever devised for the purpose. Weight 2 lbs., length 12 inches, opens 2 inches and cuts 1½ inches. It has a detacnable knife, which can be replaced in a few minutes.

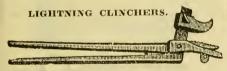
LIGHTNING HOOF SHEARS.



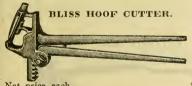
In operation The Shear. Net price each.....\$1.75

The Shears, unlike a pair of nippers, has a square cut, not cutting on a circle; the dull, or outside bit stays where you place it; the knife passes right through to the copper, cutting its way regardless of nails or anything, not teaing the outside or enamel of the hoof, as is so frequently done by the nippers.

A great tool.



Net price each..... This tool does entirely away with the possi-bilities of being injured by an ugly horse or colt while clinching down the nails.



Net price each.....\$1.80

Is most powerful.

Does the best and largest range of work.

Easiest kept in order.

Makes easier work of hoof cutting than any other tool made.

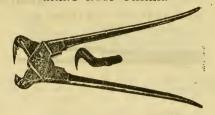
LITTLE GIANT BLACKSMITHS' BUTTERIS.



Net price each. Butteris Complete\$1.50

length, knives replaceable.

GIANT HOOF PARER.



Net price each.....\$1.67

Note—The giant is the lightest, handiest, most powerful straight-cut Hoof Parer on the market.

In this tool we have a principle that produces a maximum jaw movement, while the handles can be reached with one hand at any time. This too has the largest amount of leverage, with the least complication of any tool out.

Extra Jaws, each, postpaid.....\$0.64

LARSON HOOF PARER



Blacksmith Larson Pincers are drop forged from tool steel and hand tem-pered and 13 inches in Have wide open length. jaws and a wonderful leverage owing to the short distance from the rivet to the jaw clip. The han-

dles are long, slim and very strong and the jaws will open wide, thereby enabling a person to pry off any width shoe from a hoof. Net price each, \$0.90

CALK DIES.





Note-This will be found to be a most convenient and serviceable tool.

HORSESHOERS' KNIFE STONE.



Net price each\$0.10

FARRIERS' TOOLS.

BLACKSMITHS' STRAIGHT LIP TONGS.



Sizes, inches14 16 18 20 22 24 Net price ea..\$0.25 .25 .30 .35 .40 .45

STEEL FORGING TONGS.



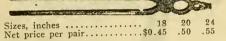
Round Nose.

BLACKSMITHS' BOLT TONGS.



For Holding Bolts or Round Iron.

SOLID STEEL PICK-UP TONGS.

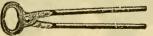


HELLER'S CLINCH TONGS.



Net price each\$1.20

COMMON FARRIERS' PINCHERS.



 Sizes.
 Net price cach.

 10 inch
 \$0.45

 12 inch
 50

 14 inch
 55

CHAMPION BALL BEARING HOOF SHEAR.



Sizes.						Net	price	each.
12 inch		 	 	 	 			\$2.25
14 inch		 	 	 	 			2.50
Extra F	nives		 	 	 			60

HELLER'S CUTTING NIPPERS.



No. 24.

HELLER'S HOOF PARERS.



Net price each ...

HELLER'S FARRIERS' PINCHERS.



Sizes, inches 10 12 14 16 Net price each\$0.60 .85 1.10 1.38

HELLER'S HOOF TESTERS.



ECLIPSE HOOF SHEAR.



Net price each\$1.20

Note—The spring brings the tool wide open as soon as the cut is made.

CHAMPION ADJUSTABLE HOOF PARER.



Net price each.....\$1.20

Note-Fitted with adjustable knife, can be replaced when worn out.

CHAMPION ROUNDING HAMMER.



No. 4.

Sizes,		Net price each.
2, 21/4, 21/2, 23	i, 3 lbs	\$1.15

CHAMPION DOUBLE PEINED HAMMER.



No. 8.

Sizes.	Net price each.
2, 21/4, 21/2, 23/4, 3 lbs	\$1.15

CHAMPION SHARPENING HAMMER.



No. 11.

Sizes.		Net	price each.
2, 21/4, 2	1/2, 23/4, 3	lbs	\$1.15

CHAMPION PATTERN FITTING HAMMER.



No. 9.

Sizes.					Net price each.				
2,	21/4,	21/2,	23/4,	3	lbs\$1.15				

CHAMPION ELECTRIC SHARPENING HAMMER.



No. 12.

51	zes.					Met	price e	acn.
2,	21/4,	21/2,	23/4,	3	1bs		\$1	.15

CHAMPION B. S. HAND HAMMER.



No. 7.

	zes.				Net price each.
2,	21/4,	21/2,	23/4,	3	lbs\$0.65

CHAMPION FITTING HAMMER.



No. 5.

Si	zes.				Net	price cach.	
2,	21/4,	21/2,	23/4,	3	lbs	\$1.00	J

CHAMPION ROUND POLE DRIVING HAMMER.



No. 13.

Sizes.			Net	price each.
14, 16,	18, 20	oz		\$0.63

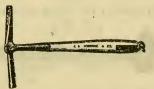
CHAMPION SQUARE POLE DRIVING HAMMER.



No. 14.

Sizes.		Net price each.
14, 16, 18,	20 oz	\$0.63

TRIMMERS' HAMMERS.



Net price each.

No. 59, White Hickory Handle......\$1.20

HELLER'S DRIVING HAMMERS.

No. 64.



HELLER'S PATTERN DRIVING HAMMERS.

No. 65.



HELLER'S HORSESHOERS' HAND HAMMERS.

No. 63.



HELLER'S FITTING HAMMER.

No. 62.



Sizes. Net price each. 2, 21/4, 21/2, 23/4, 3 lbs......\$1.10

HELLER'S ROUNDING HAMMER.

No. 61.



HELLER'S CAT HEAD HAMMER. No. 60.



MACHINISTS' HAMMERS.



Ball Pein. Hand. Riveting. RIVETING. Net Price BALL PEIN. Sizes. Weight. Sizes. Net Price Weight. No. each. 4 oz.\$0.26 5-0 4 oz..\$0.45 7 oz. .28 6 oz.. 4-0 9 oz. .30 3-0 8 oz .. 12 oz. .33 3 2-0 12 oz., .45 0 1 lb. .46 4 .35 15 oz. 1 lb. .50 2 oz. .38 1 1 lb. 4 oz.. 1 lb. 6 oz. 8 oz. . .52 .40 1 lb. 1 lb. 10 oz. 1 lb. 12 oz... . 42 HAND. 2 lb. .58 Sizes. Net price. No. Weight. each. 2 lb. 4 oz .. .60 2 lb. 8 oz.. .65 2 lb. \$0.53 2 lb. 12 oz... .70 2 lb. 10 oz. 3 lb. .57 .80 3 3 lb. .60 3 lb. 4 lb. 8 oz. .71

Weights do not include Handles.

Note.—These Hammers are made of best quality Tool Steel and are warranted.

ROBERT MANN'S SINGLE BIT AXES.



ROBERT MANN'S DOUBLE BIT AXES.



Sizes. Net price per doz. Weights, 3¼, 3½, 3¾ lbs.......\$10.50 25c advance per doz. for each ¼ lb. heavier.

Dozen price on axes does not apply to less than a half dozen.

HATCHETS.



Shingling.

Sizes.	4	Net price each.
		\$0.50

HALF HATCHETS.



Sizes.	Net price each.
	\$0.50

CLAW HATCHETS.



Size	s.			Net pri	ce each.
					\$0.50

LATH HATCHETS.



Sizes.		Net	price each.
Underhill's	Pattern		\$0.75

HAND AXES.



Sizes.			Net	price each.
No. 3, 5 No. 4, 5½	inch	cutcutcut		87

ADZE EYE NAIL HAMMERS.



Bell Face.

No.	Size.	Weight.	Net price each.
51	1		\$0.55
511/2	11/2		
52	.2	13 oz	
53	3	7 oz	45

ADZE EYE NAIL HAMMERS.



Weights do not include Handles.

Note.—These Hammers are made of best quality Tool Steel and are warranted.

		Straight	Face.
No.	Size.	Weight.	Net price each.
1	1	1 lb. 4	oz\$0.55
111/2	11/2	1 lb.	
2	2	13 oz.	
3	3	7 oz.	

CARPENTERS' ADZES.



Net price, each\$1.40

GRUB HOES.



Net price, per doz......\$3.65

PICKS.



Net price, per doz......\$3.75

MATTOCKS.

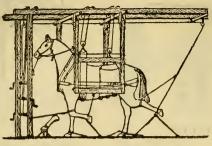


Net price, per doz.....\$4.75

Dozen price does not apply to less than a half-dozen of a kind.

MARTIN HORSE SHOEING RACK.

Shipped From Factory.



.....\$40.00 Net price each

You doubtless are already convinced by many instances, of the necessity of some preventive of the danger and aid to shoeing wild horses. The limited production of the Martin Horse Shoeing Rack-such a practical invention in successful use for eight years for shoe-ing vicious kicking and crippled horses—heretofore prevented its more general sale.

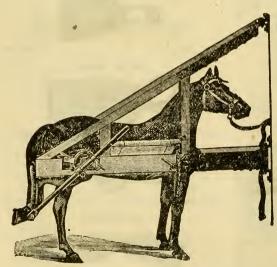
It pays for itself in a short time. The horse fastened in it can not injure itself, and parties we have sold to find their trade gladly pay \$1.00 to \$3.00 and often \$5.00 extra for shoeing a bad horse. You can work unmolested, and your labor is easy and more rapid. Experience has proved it especially valuable for shoeing colts, breaking them to shoeing at once. Careful blacksmiths put all restless horses in it; their lives are no longer in danger and time is saved thereby. Hundreds of testimonials read that they would not carry on shoeing without one. A blacksmith stating that as long as he carried on shoeing, and if he could not get another, he would not sell his at any price.

We guarantee the Rack to be perfectly satisfactory, and to prove that you take no risk, we agree to take back the rack and refund your money if it does not do as we promise. No horse or mule but can be held and easily shod. Strongly made of best materials. One will last

a lifetime.

THE BARCUS HORSE STOCKS.

Shipped From Factory.



We answer the following ques-

tions which are often asked:

1. What is the price of your Stocks complete? \$62.50.

2. How long is the frame when

in use? 10 feet.

3. Do they swing out of the way when not in use? Yes, both ways

up against the wall.

4. What keeps the Stocks from swinging when in use? A brace from rear end of frame to ceiling or floor.

5. How many Leg Arms go with every machine? One Leg Arm

6. Do you advise using two Leg Arms? Yes, and some use more, although one is used very successfully.
7. What does an extra Leg Arm

cost? \$20.

8. Can you handle the hind foot as well as the front foot? Yes. 9. Is there danger of a horse getting hurt in the Stocks? No, even the veterinaries use them.

10. Do you give directions for setting up and using Stocks? Yes, very complete with every machine. Be sure to read them.

What is the freight on the Stocks? They are billed out at 450 lbs., knocked down and third class rate. See that you are not overcharged for freight.

Net Cash price each.....\$62.50

11/8x7

11/4x7

HOW TO MEASURE HALF PATENT AXLES.



The size of the axle is the size of the square part of the bed just back of the collar.

The length of the axle is measured as indicated. This is equivalent to hub length. The axle box itself will measure about ½ inch less than length of axle. Give us size and length of axle as above indicated and save all errors.

We are prepared to weld axles at the following net prices. Give distance between collars when axles are welded, or give width of track in feet and inches.

			n
			Price per set
1 1/8	inch	and smaller	<i>2</i> \$0.95
		• • • • • • • • • • • • • • • • • • • •	
13/8	inch		1.35
$1\frac{5}{8}$	inch		1.90
		aping Axles for Drop o	r Arch Bed, we

charge as follows:

Price per set.

					per set
11/8	inch	and	smaller	 	 \$0.50
11/4	inch			 	 70
			nch		

Prices on Cranked Axles on receipt of drawings with exact dimensions.

No. 12 HALF PATENT AXLES, SHORT BED, OR STUBS.



Steel Double Collar.

	Net price		Net price
Sizes.	per set.	Sizes.	per set.
3/4 x6	in\$1.12	11/8x61/2	in\$1.48
3/4 x6 1/2	in 1.12	11/8 x7	in 1.48
7/8×6	in 1.15	11/4 x 6 1/2	in 1.80
7/8 x 6 1/2	in 1.15	11/4×7	in 1.80
15x6	in 1.16	13/8×7	in 2.44
15 x6 1/2	in 1.16	13/8×71/2	in 2.44
1 x6 ½	in 1.28	1½x7	in 3.21
1 x7	in 1.28	1½x7½	in 3.21
1 16 x 6 1/2	in 1.35	1½x8	in 3.21
1 1 x7	in 1.35	15/8x8	in 4.40

No. 11 HALF PATENT AXLES, LONG SQUARE BED.



Steel Double Collar.

Mat mains

	rice price		TACC DITICE
Sizes.	per set.	Sizes.	per set.
3/4×6	in\$1.40	17/8×7	in\$1.80
3/4×6½	in 1.40	11/4×61/2	in 2.19
7⁄8 x 6	in 1.40	11/4×7	in 2.19
7/8 x 6 1/2	in 1.40	13/8×7	in 3.08
1 x6½	in 1.54	13/8×7½	in 3.08
1 x7	in 1.54	1½x7	in 3.85
1 16 x 6 1/2	in 1.67	1½x7½	in 3.85
116x7	in 1.67	1½x8	in 3.85
11/8x61/2	in 1.80	15/8×8	in 5.00

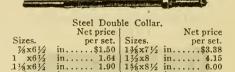
No. 11 HALF PATENT AXLES, FANTAIL BED.



Steel Double Collar.

	Net price		Net price
Sizes.	per set.		per set.
3/4 x 6 1/2	in\$1.38	11/8×61/2	in\$1.80
7/8 x 6 1/2	in 1.38		
1 x6½	in 1.54		in 2.19
1 16 x 6 1/2	in 1.67		

No. 11 HALF PATENT AXLES, COACH BED.



No. 11 HALF PATENT AXLES, FANTAIL-SWAGED BED.

13/4x9

in..... 7.50

in..... 1.90

in..... 2.29

R(CLEVILAND)

	Net price		Net price
Sizes.	per set.	Sizes.	per set.
3/4×6 1/2	in\$1.43	15 x6 1/2	in\$1.47
7/2×8 1/2	in 1.45		

THE MATHER "THOUSAND MILE" AXLES.



Sizes.	Net price	Sizes.	Net	price
3/4 x 6 1/2	in\$2.00		in	2.40
7/8×6 1/2	in 2.00		in	
18x6½	in 2.00		in	3.15
1 x6½	in 2.25			
	Long	g Bed.		

 $34 \times 6 \frac{1}{2}$ in... 2.45 $\frac{1}{8} \times 6 \frac{1}{2}$ in... 2.45 $\frac{1}{8} \times 6 \frac{1}{2}$ in... 2.45 $\frac{1}{8} \times 6 \frac{1}{2}$ in... $\frac{2.45}{1} \times 6 \frac{1}{2}$ in... $\frac{2.70}{1} \times 6 \frac{1}{2}$ in... $\frac{2.95}{1} \times 1 \times 7$ in... $\frac{3.80}{1} \times 1 \times 1 \times 7$

1½x7 in..... 3.20 Above sizes in coach shape, 10c per set

Note.—Will run 1,000 miles with one oiling. Positively dust and dirt proof. Cuts away less of hub than any other axle. Cannot get out of order. Simplicity itself.

HALF PATENT DOUBLE COLLAR AXLE BOXES.

			JUALIS.	
	1	Net price		Net price
Sizes		per set.		per set.
3/4 7/8 1/5	in	\$0.47	11/8 in	\$0.88
7/8	in	59	1¼ in	1.15
_ 1 8	in			1.45
1	in		1½ in	1.75
1_{16}^{1}	in	68		

SOLID COLLAR CONCORD EXPRESS AXLES.



			Ne	t price p	er set.
		5	Square	Čoach	Short
Size a	xle.		bed.	shape.	bed.
11/8×61/2	in.	box\$	2.93	\$ 3.18	\$2.47
1.1/4 x7	in.	box	3.60	4.00	2.99
11/4 x7 1/2	in.	box	3.60	4.00	2.99
13/8×7	in.	box	4.36	4.80	3.99
13/8x71/2	in.	box	4.36	4.80	3.99 .
1½x8	in.	box	5.31	5.75	4.36
15/8×8	i11.	box	6.30	6.75	
13/4×9	in.	box	7.38	8.00	
2 x10	in.	box	9.90	10.90	

WAGON SKEINS AND BOXES. COMPLETE.



Sizes.	Net price per set.		Net price per set.
2½ x 7 2½ x 7½ 2½ x 8 2¾ x 8 2¾ x 8 2¾ x 8 2¾ x 9 3 x 9 3 x 10	inch.\$1.35 inch. 1.35 inch. 1.43 inch. 1.58 inch. 1.60 inch. 1.80 inch. 1.80 inch. 2.00	3½ x 11 3½ x 10 3½ x 11 3½ x 11 3½ x 12 3¾ x 11 3¾ x 12	inch. \$2.25 inch 2.33 inch 2.40 inch 2.50 inch 2.64 inch 2.70 inch 2.82 inch 3.18

ULRICH PATENT TRUSS SKEINS.



Sizes.					per set.
23/4 x 8 inch .					\$2.10
23/4x81/2 inich					2.16
3 x 9 inch .					
31/4 x 10 inch .					3.00
$3\frac{1}{2} \times 10$ inch.					3.15
31/2 x 11 inch .					
33/4 x 11 inch .					3.55
334 x 12 inch .					
4 x 12 inch .					4.20
Note.—The	best	Truss	Skein o	on the	market.

WAGON SHOES.



					Net price	each.
2	inch.	weight	each	161/2	1bs	\$0.63
21/2	inch.	weight	cach	191/2	lbs	.73
		weight				
		weight			lbs	
		weight			lbs	

SANDAGE STEEL WAGON SKEINS AND BOXES.



Forged from continuous blank of

WROUGHT STEEL.

Sizes.		Net price per set.
$2\frac{1}{4} \times 7$	inch	\$3.74
21/2 x 71/2	inch	3 . 80
2½ x 8		3 . 87
$23/4 \times 8$	inch	4 . 05
23/4 x 81/2	inch	4 . 13
3 x 9	inch	4 . 33
3×10	inch	4 . 46
$3 \frac{1}{4} \times 10$	inch	5.00
31/4 x 11	inch	5 . 25
3½ x 10	inch	5.53
3½ x 11	inch	5.67
3 ½ x 12	inch	6.30
33/4 x 11	inch	6 . 65
334×12	inch	6.65
4 x 12	inch	8.00
LINCH D	OTH STEEL SKE	INS AND BOXES

LINCH PIN STEEL SKEINS AND Shipped from factory at above prices.

BLACKSMITHS' BELLOWS.



STANDARD PATTERN.

Width.	Sizes. Net price	each.
24 inch	Sizes. Net price	4.00
26 inch		4.40
		4.80
		5.00
		5.75
		6.20
36 inch		7.00
38 inch		7.85
40 inch		9.10
42 inch	.,,	10.80
44 inch		3.50
44 111011		
	EXTRA LONG PATTERN.	

Width, Sizes.	Net price each.
24 inch	\$ 4.50
26 inch	$\dots 5.25$
28 inch	6 . 00
30 inch	6 . 2 5
32 inch	
34 inch	
36 inch	8.50
38 inch	9.75
40 inch	10.50
42 inch	13.00
44 inch	

DUCK'S NEST TUYERE IRONS.



Double. Single.

No. 2, Single Duck's Nest, weight 15 lbs.\$0.60 No. 2, Double Duck's Nest, weight 17 lbs. 0.70

WARREN'S TUYERE IRONS.



Very simple and easily adjusted.

Net price each \$1.50 Note.—The blast is regulated by simply revolving the ball, which has three unequal sides. Open the bottom valve, and all cinders and ashes drop out. Weight, 31 lbs.

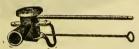
CLARK'S TUYERE IRONS.



Net price each.

No. 2, Weight about 21 lbs.....\$1.10 Note.-These Tuyere Irons are made with ball valves; are convenient and durable.

NORTON'S TUYERE IRONS.



Net price each.

Weight, about 27 lbs.\$1.40 Note .- To regulate the blast, turn the large rod. The cinders and ashes may be removed by drawing out the small rod, which opens the side. The levers and spring are readily changed to either side for right or left hand use,

SUTTON'S TUYERE IRON.



Net price, each..... A new and desirable Tuyere Iron. Having a fire-pot combined with the Tuyere Iron, it is the best thing ever invented for the forge.

POWER'S FIRE POT.



...\$1.00 Net price, each.... Concentrates the heat where wanted. Fits any common tuyere iron. Prevents the fire from spreading. Keeps it clean and bright.

POWER'S TUYERE AND FIRE POT.

TUYERE AND FIRE POT IS CAST SOLID TOGETHER; WEIGHS, COMPLETE, ABOUT 45 POUNDS.



Net price, each.....\$3.25

Has three different changes of blast. Cinders and ashes can be let down without disturbing fire.

It concentrates the heat just where it's wanted.

The fire always the same.

Cannot spread at the bottom.

It does away with clay, mortar, brick, etc. You can have a small or large fire as needed.

ROOT'S NEW ACME FIRE BED AND TUYERE IRONS.



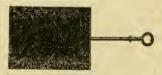
The sides of the Tuyere are kept cool by

circulation of air around the bowl.

No clay need be used in same. Net price, each.

.....\$4.75

THOMPSON'S EXTENSION FIRE TUYERE IRONS.



Net price each. Fire Bed 15 in. x 20 in., depth 51/2 in.,

in length may be obtained with this I tipere. Is composed of the following parts: Grate with four slots as shown in cut, two running crosswise, remaining open all the time and two running lengthwise and which are so arranged that they can be varied in size, thus controlling the length of the fire. This is accomplished by moving the far end of the fire bed in or out by means of the long rod shown in cut.

No. 400 CHAMPION "WHIRLWIND" BLAST ANTI-CLINKERS HEAVY NEST TUYERE IRON.



Net price each.

No. 400 Champion "Whirlwind" Blast Anti-Clinker Heavy Nest Tuyere Iron is 5 in. deep, 834 in. wide and 101/2 in. long, over all 123/8 x 143/4 in. Weight, 60 lbs.

TUYERE IRON THAT MAKES A "WHIRLWIND" BLAST.

Registered in U. S. Patent Office.

The No. 400 Champion "Whirlwind" Blast Anti-Clinker Heavy Nest Tuyere Iron in-creases the output of a blacksmith fire from one to two hours per day with at least one-tenth to one-quarter saving in coal. This is tenth to one-quarter saving in coal. This is accomplished by consuming all the heating elements within the coal, and not blowing the heat or hot air out of the fire up the chimney, as is the trouble with all other Tuyere Irons. The illustration of the "Whirlwind" Blast Anti-Clinker Heavy Nest Tuyere Iron plainly shows how it is built and how it works. It has a heavy cast iron nest into which the roarrow which the receive black of the No. 400.

ing white heat pressure blast of the No. 400 Blower is delivered through three slots. One of these slots is in the bottom, or centre of the nest, the other two slots are one on each side 2 inches above the centre slot on a forty-

five degree angle.

The roaring forcing pressure blast coming through the three slots in opposite directions, and meeting in the centre of the tuyere nest creates, in combination with the heavy cast iron walls of the heavy nest, a "Whirlwind" blast. In other words, prevents the blast from going in the air and right here is where the great success of this invention is found, as the blast coming from the three distinct di-rections, and meeting in the centre of the tuy-ere nest, creates a current of air which pro-duces a circular rotary "Whirlwind" blast, forcing the blast through the coal to the walls of the nest and again returning it to the cen-tre of the tuyere iron; giving the iron in the fire all the heating elements in the coal, which produces the hottest white heat blacksmith fire that ever was seen, making it the greatest money making invention that ever was placed in the blacksmith shop, for the simple reason that the operator not only can accomplish more work with less labor but, at the same time, effecting a most wonderful saving in consumption of coal.

CLARK COAL.



Net Price of Coal, per doz.....\$0.60

Is put up in neat, convenient brickettes or cakes, $2\frac{1}{8} \times 8\frac{1}{2}$ inches. It is guaranteed to

burn perfectly.

Directions for Using.—Place a piece of Clark Coal in a brisk fire until it has become red through. Then take it out and leave it for a few seconds, until the little flame which appears, has died away. Afterwards place it in the sheet metal box or drawer and then in-sert same in the heater.

Coal can be extinguished with water and used again until entirely consumed.

CLARK CARRIAGE HEATERS.



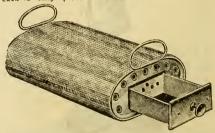
LEADER.

Metal throughout. Is 12 inches long. covered, Strong, Solidly riveted. to please. Weight, 4 lbs. Price, each, with one dozen coal......\$1.50



No. 7D.

CONSIDERING THE PRICE, all of our newest improvements, adjustable side ventila-tors, too—as well as those at the ends. These regulate the draft and heat. And yet the price each is only \$2.25 without coal.



No. 3D. 3D Clark Heater is made with white metal ends, has covering of Brussels carpet and is 14 inches long. Weight, 5 lbs.

Price, each, without coal......\$2.00
5B Clark Heater is similar to the 3D, except it is only 12 inches long. Carpet covered. Price, each, without coal.....\$1.50

PRENTISS' MACHINISTS' VISES.





Nos. 2 and 3 Stationary Bottom,

Nos. 19 and 20. Swivel Bottom.

				Ne	et price
Sizes.			Taws open.	Weight.	each.
No. 2.	31/2	in.	43/4 in.	28 lbs.	\$5.75
No. 3,			6 in.	54 lbs.	8.75
No. 19,			43/4 in.	32 lbs.	7.00
No. 20,			6 in.	65 lbs.	10.50

PRENTISS' WOOD WORKERS' VISES.





Nos. 12 and 10. Stationary Bottom.

Nos. 27 and 26. Swivel Bottom.

			Net	price
Sizes.	Taws	open.	Weight.	each.
No. 12, 31/2 i	n. 7	in.	30 lbs.	\$6.75
No. 10, 41/2 i	n. 9½	in.	59 lbs.	9.25
No. 27, 31/2 i	n. 7	in.	34 lbs.	8.00
No. 26, 41/2 i	n. 9½	in.	67 lbs.	10.75

PRENTISS' BULL DOG WOOD WORKERS' VISES.



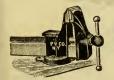


No. 59. Stationary Bottom.

No. 99. Swivel Bottom.

				Net	price
Sizes.			Jaws open.	Weight.	each.
No. 59,	41/4	in.	9 in.	48 lbs.	\$5.90
No. 99,	4 1/4	in.	9 in.	58 lbs.	7.00

SHEPARD WOOD WORKERS' VISES.





No. 68. Stationary Bottom.

SNN

No. 69. Swivel Bottom.

					Net	price
ize	s.			Jaws open.	Weight.	each
lo.	68,	4 1/2	in.	9 in.	42 lbs.	\$4.2
lo.	69,	4 1/2	in.	9 in.	46 lbs.	5.0

NEW SHEPARD VISES.



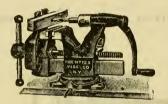


Nos. 158 to 163. Stationary Bottom.

Nos. 159 to 63. Swivel Bottom.

				Net	price
Sizes.	J	aws	open.	Weight.	each.
No. 158, 2	in.	2		21/2 lbs.	
No. 160, 2	in.	2	in.	4 lbs.	
No. 161, 21/2		3	in.	11 lbs.	1.40
No. 162, 3½	in.	4	in.	16 lbs.	1.95
No. 163, 4	in.	6	in.	30 lbs.	2.75
No. 159, 2		2	in.	3 lbs.	.80
No. 60, 2	in.	2	in.	5 lbs.	1.25
No. 61, 21/2	in.	3	in.	12 lbs.	1.60
No. 62, 3½		4	in.	18 lbs.	2.10
No. 63, 4	in.	6	in.	32 lbs.	3.15

HANDY DRILL ATTACHMENTS.



For Shepard's New Vises.

Sizes. Drill Attachment	for	Vise	No.	62	rice and	
No. 162 Drill Attachment	for	Vise	No.	63	and	

Note.—This is the only Drilling Attachment that can be securely fastened to vise, thus enabling operator to do as perfect work as with expensive post or bench drill. Sockets are fitted for ½ inch round shank drills.

PIPE VISES.

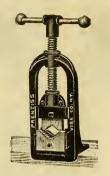
Heavy made for service.



No. 1.

Size	s.						Net price each.
No.	1,	holding	1/8	to	2	inch	Pipe\$2.25
No.	0,	holding	1/4	to	3	inch	Pipe 3.25

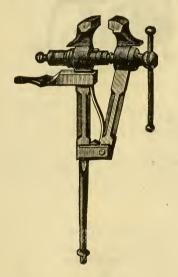
PRENTISS' PIPE VISE.



Net price each.

No. A. Holds 1/8 to 2 in. Pipe, \$1.20

WROUGHT IRON SOLID BOX VISES.



Net price each. No. 60, weight 60 lbs., width jaw 41/2 No. 70, weight 70 lbs., width jaw 5 in.. 7.85

FARRIER'S SOLID BOX WROUGHT VISE

WROUGHT IRON BENCH SCREWS.



Double thread with wood handle and movable collar. Diameter. Net price each. 11/8 1 1/4 1 1/2

inch......

Diameter Net price

each.

\$2.80

3.20

3.20

3.60

3.60

5.20

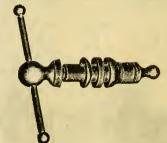
5.60

of Screw.

13% in. 13% in. 134 in.

in. 1 in. 1½ in. 1¼ in. 1¼ in.

VISE BOXES AND SCREWS.

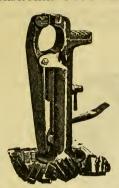


		a	DOUT		W.
35	35	33/4	inch\$3.65		N.
40	40	4	inch 3.78		
50	50	4 1/2	inch 4.14	No.	For Vises From
60	60	5	inch 4.65	100.	
65	65	5	inch 5.10	11/2	No. 25 to 40 No. 45 to 55
75	75	51/4	inch 5.90	$\frac{1}{2}^{1/2}$	No. 60 to 65
80	80	51/2	inch 6.30	21/2	No. 70 to 75
90	90	53/4	inch 7.20	3 3½	No. 80 to 85 No. 90 to 95
100	100	6	inch	4	No. 100 to 125

Weight. Width of Jaw. Net price each.

No.

HORSESHOERS' FOOT VISES.



"LITTLE GIANT."

For forming, sharpening and welding calks on horse and ox shoes, for making bolt heads, and takes the place of an ordinary vise for bending and shaping hot iron, thus combining two machines in one. Shoe calks can be made two machines in one. Shoe calks can be made sharp or square for winter or summer use, and the dies are so shaped that the calks are better formed than they can be in the ordinary way, and from two to three times as many. The die on which the calks are formed is of the best tool steel, and is shaped so that it forms the calk the right shape. Sharp or square calks can be formed by simply turning steel die

Net price each.
Little Giant, complete with Shoeing Dies,
only\$10.50
Little Giant, complete with Shoeing Dies

and Bolt Heading Tools...... 12.50

GREEN RIVER FOOT VISE.



The vise which drops open when not in use forms both sharp and straight calks, the forming die being of tool steel of proper shape. The die may be turned over for summer work.

Net price each.

Green River for Shoeing only........\$9.75

Green River for Shoeing and Bolt Head-

ing\$10.60

CHAMPION MOVABLE FOOT VISE.

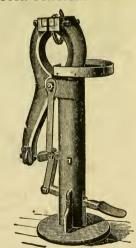


Champion Movable.

Effective and cheap. Reversible steel block for sharpening shoes in winter. Made of wrought iron and steel.

Net price each. Champion Movable\$6.75

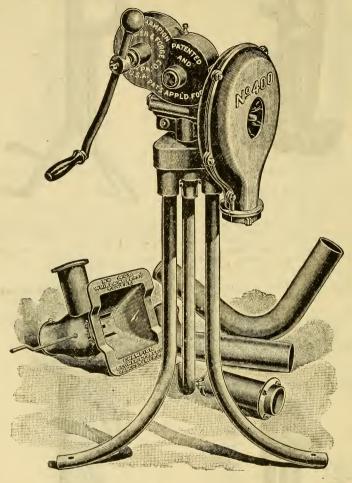
CHAMPION STATIONARY FOOT VISE.



This is the most perfect tool of its kind yet This is the most perfect tool of its kind yet produced. By a simple adjustment the grip of the jaws is adjusted to thick or thin shoes or iron, and by adjusting the stop it can be made to lock itself or not, at pleasure, which is a feature that no other horseshoers' vise possesses. The locking of the vise does away with an extra vise for filing shoes and a light touch of the toe under the foot lever releases it. They are strongly made, with steel jaws, one jaw being removable.

Net price each. Champion Stationary\$11.00 THE FAMOUS No. 400 CHAMPION STEEL BLACKSMITH BLOWER.

This is the Blower that has Revolutionized the World's Hand Blacksmiths' Fires and Made Blacksmithing a Most Profitable Business.



THE FAMOUS No. 400.

Made with Adjustable Ball Bearings Only.

WHY Is the No. 400 Blower Famous? ASK AN OWNER.

Full description next page.

From Stock—Net price each

No. 400 Champion Steel Blacksmith Blower No. 400 Champion "Whirlwind"
Blast Anti-Clinker Heavy Nest Tuyere Iron (illustrated on page 38)
Fan 12 in. in diameter, complete with Piping. Weight 150 lbs.....\$18.00

No. 400 Champion Steel Blacksmith Blower is made for right or left-hand fires. Right-hand Blowers always furnished unless otherwise specified.

THE FAMOUS No. 400 CHAMPION STEEL BLACKSMITH BLOWER. Made with Adjustable Ball Bearings Only.

The No. 400 Champion Steel Blacksmith Blowers and Steel Forges, after eight years of practical blacksmith work, number over 272,000 today in the hands of their very happy users. We can say with great pleasure that the No. 400 Blowers purchased eight years ago are today running as smooth and as noiseless as they run the first day they were placed to the fire, and in our best judgment, we believe the same can be said of the No. 400 Blower after it has been running the lifetime of the average man.

The No. 400 "Patented" High Speed Spiral Gearing is the only high speed gearing that can be possibly built to run a Blower at the extreme high speed that is necessary to produce a roaring, white heat pressure blast without early destruction of the gearing, and therefore, ask those who have the opportunity to examine any of the oldest No. 400 Blowers they can find running, and it will be seen that the gearing runs smooth, noiseless and even to the hand. It will also be found that the crank is without lost motion, which shows that the gearing and entire machinery of the No. 400 Blower is as good as the day it left the factory.

The reason why the No. 400 Spiral Gearing stands in a class absolutely of its own for extreme high speed, is that the No. 400 "Patented" Spiral Gearing is simple in construction and all parts are large, strong and powerful. The Spiral Shaft, which by the way is the only one piece of the entire gearing that runs at high speed, and the spiral gear are the same in size and diameter, and have the same size teeth that are used on spiral gears and shafts running at 20,000 revolutions per minute carrying a heavy load, while the No. 400 Champion Steel Blower at no time runs at a higher speed than 2,000 revolutions per minute and in a No. 400 Blower carries no load, which makes durability an absolute certainty.

Another reason why the No. 400 "Patented" High Speed Spiral Gearing is durable is that it has a continuous meshing with a concaved spiral gear riding the spiral shaft lengthwise with eight full teeth of the spiral gear continuously meshing into eight full teeth of the spiral shaft which forever makes lost motion and noise imbossible.

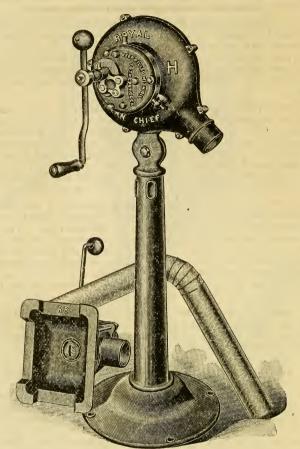
The No. 400 Blower is furnished with the "Whirlwind" Blast Anti-Clinker Heavy Nest Tuyere Iron which enables us to guarantee the No. 400 Blower to increase with ease the output of a blacksmith fire fully two hours per day with a saving in coal of at least once or twice the first cost of the No. 400 Blower every year it is used. This is accomplished by consuming all the heating elements in the coal. The "Whirlwind" blast does not blow the heat and hot air out of the fire and up the chimney as is the trouble with all other Tuyere Irons. See "Whirlwind" Blast Anti-Clinker Heavy Nest Tuyere Iron shown on page 38.

Revolutionizing and changing a mechanical custom brought down from ancient times, requires a tool of more than ordinary ability, and this achievement of revolutionizing the Bellows, the Lever Blowers and Lever Forges of the world, belongs to the No. 400 Champion Steel Blowers and Steel Forges. To revolutionize a system of doing work is something that comes to few of us, and therefore, has instilled a special pride of individuality in the construction of every No. 400 Champion Steel Blower and Steel Forge that is manufactured.

The general construction of this Blower is, therefore, of the finest and highest grade that can be made out of phosphor bronze and tool steel. It is supplied with adjustable ball bearings which are made of the highest grade tool steel. The cups and cones are lathe turned, hardened as hard as glass and ground to the highest possible finish, making the most durable and practical bearing that can be constructed by human hands.

No. 400 Champion Steel Blacksmith Blowers, No. 400 Champion Whirlwind

ROYAL BLOWER.



"The Successful Blower"

Crank Turns Forward or Backward,

Noiseles and easy to Operate.

Gear case is oil-tight and dust-proof. Gears run in a continuous bath of oil.

Fire-pot is 8x91/2x4 inches inside.

Gears are Phosphor Bronze and Steel, flat and straight cut. No Spiral or Worm
Gears.

A powerful blast; lasting after blast.

Fan, 12 inches.	Height, 47 inches.	Weight, 135 pounds.
Can be furnished	to operate with the right arm, for	left-handed smiths, when
desired.		
Net price, complete a	s shown—from stock	\$16.00
Royal Hand and Powe	er Blower Combined-from factor;	y. Net price 20.00

BUFFALO No. 200 GEARED HAND BLOWER.

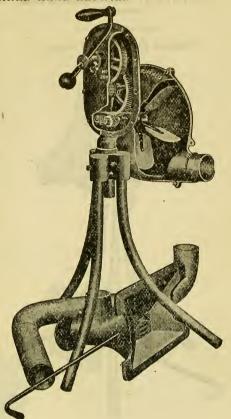


"Pride of the Modern Smithy"

Buffalo No. 200 is the latest improved type of hand blower—built on mechanical principles.

Cut shows right-hand blower—also built left-hand if desired, on special order.

Patent applied for.



BUFFALO NO. 200 BLOWER AND NO. HH. TUYERE.
Net price each
Buffalo No. 200 with tuyere, price\$13.75
Buffalo No. 200 without tuyere, price
No. HH. tuyere alone, price
Size HH, tuyere 111/x9x4 in. Weight
Heavy cut spur and helical gears, mounted in a rigid box frame entirely independent of
casing and run in oil. When once oiled blower remains in perfect condition for months.
GUARANTEE.—1st. against all cost of repairs due to wear for five years; 2d, to give the
most powerful blast; 3d, to give the most air per revolution; 4th, to be the easiest running; 5th,
to be the most durable hand blower built.
Height to crank (adjustable)
Diameter of fan case
Weight of blower

GUARANTEED CERTIFICATE.

Ruffal	o N	Y	190

BE IT KNOWN, to the purchaser of this machine that same is hereby guaranteed against cost of repairs due to wear for five years from date of this certificate. All parts wearing out within this time will be replaced free of charge f. o. b. cars Buffalo, N. Y., and no questions asked. Mention date of this certificate, name and style of the machine.

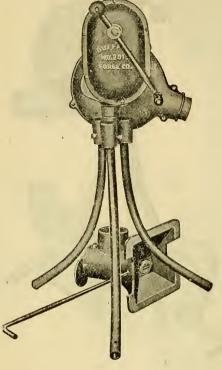
The machine is also guaranteed to be of the same capacity and strictly as described in Catalog No. 77, 1907 edition. BUFFALO FORGE COMPANY,

W. F. Wendt, President. [Seal.]

BUFFALO No. 201 GEARED HAND BLOWER.

Right or Left Hand.

Shipped Direct from Factory.



BUFFALO No. 201 GEARED HAND BLOWER.

Buffalo Improved Side and Center Blast. Tuyere No. HH.

The immense advantage of this tuyere over all others is at once recognized.

By turning the ball sideways or vertical, a blast is secured as desired. This tuyere is regularly furnished with Buffalo Nos. 200 and 201 Blowers.

Blower is adjustable for height, and fan casing will deliver blast at any angle, but does not give quite as much air as the standard scroll fan casing used on No. 200 Blower. The weight and height same as No. 200 on previous page.

See guarantee.

"Pride of the Modern Smithy."

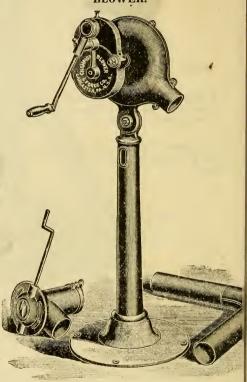
Turn the crank either way. This is a right or left hand blower.

Weight and height same as Buffalo No. 200 Blower, see previous page.

Features of Buffalo No. 200 and 201 Blowers.

The spur and helical gears are cut and finished on special machinery. Spiral gears which transmit power by sliding contact with consequent friction and wear, not used in this blower. The regular wear of such gears is bound to require early replacement. The gears are held in a rigid cast-iron box frame, and cannot get out of alignment. The bearings are extra long and are bored and reamed to gauge in the solid stock. No brass boxes to wear, throwing gears out of line or requiring adjustment. Gears run in oil in a dust-proof case, which can be removed without disturbing the mechanism. Gears are broad and strong, with large properly formed teeth.

LANCASTER GEARED BLACKSMITH BLOWER.



The Champion Lancaster Geared Blower is a well built, cheap, direct driven Blacksmith Blower, which has been built to meet the demand for a cheap Blacksmith Blower.

This Blower, as will be seen by illustration, is supplied with the Champion Adjustable Nozzle Tuyere Iron; it is smooth running, crank turns either way to make the blast and goes out with our recommendation.

The Champion Lancaster Geared Direct Driven Blacksmith Blower, with Fan 12 inches in diameter, Tuyere Iron and Piping complete. Weight 110 lbs.

Price, each\$10.50

WESTERN CHIEF POWER BLOWERS.

Shipped from factory.



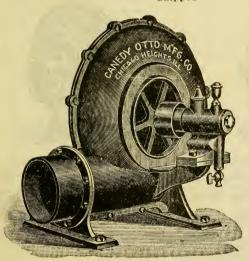
FAN BLOWER No. F2.

This is a light, neat, power Fan Blower, very desirable for ventilating purposes, and has capacity for two or three forge fires. Suitable for light belting and ordinary use. Has 134-inch pulley for belt connections.

There I was a second and a second a sec
Size16½ inches
Weight55 lbs.
Revolutions1,500 to 2,000
Net price each\$7.25

SMALL PRESSURE BLOWERS.

Shipped from factory.



For Forge Fires, Etc.

These Blowers are adapted to forge fires and small, light cupola work. They are very strong and durable, smooth running, and handsome in appearance. Sizes P3, P4 and P5 have grease cup in addition to oil cup, so that should oil cup run dry the grease cup will continue to lubricate and prevent heating. Built for service.

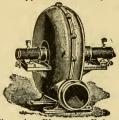
No. of Blower	Height in inches	Diameter of Inlet	Diameter of Outlet	Diameter of Pulley	Face of Pulley	Revolutions per min. 2 oz. Blast for Boiler Fires	Revolutions per min. 4'oz. Blast for Forge Fires	No. of Forge Fires	Sq. ft. of Boiler Grate Surface supplied by Blower	Weight, lbs.	H. P. Required about	Net price each
P 1 P 2 P 3 P 4 P 5	10 15 18 20 24	3¼ 4½ 5¼ 6½ 7	234 443 433 433 72	178 3 3 3 3 42 48	1¼ 2 2 2½ 3¼	3675 3000 2600 2300 1928	4640 4000 3600 3200 2680	1 2 5 4 7	2 5 6 8 10	15 35 50 70 105	1 1 14 13 13	7.00 10.00 11.00 15.50 18.75

THE CHAMPION BLOWER.

Shipped from factory.

THE CHAMPION EXHAUST FAN.

Shipped from factory.





The Champion Blower or Exhaust Fan is constructed like the Blowers used on many of our Forges and Hand Blowers. While they are built in the most practical manner for hand power, for steam power we can only recommend them where a light current of air is required. They are built to meet a demand for a cheap Power Blower and Exhaust Fan.

This blower is intended for blowing fires in portable and small stationary boilers, also for forge fires and various purposes where a small current of air is desired, and the Exhaust Fan is also intended for light work.

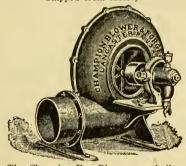
		ided for in	•									Net p	
No.	0	Champion	Blower.	10	in.	high.	Will	blow	one	fire		 	\$ 5.00
No.	00	Champion	Blower.	14	in.	high.	Will	blow	two	ordinary	fires	 	 6.00
No.	000	Champion	Blower.	161/2	in.	high.	Will	blow	three	e ordinary	fires	 	 7.00
No.	01	Champion	Exhaust	Fan.	10	in.	high.					 	 6.00
		Champion											
No.	0003	Champion	Exhaust	Fan.	16	½ in.	high.					 	 8.25

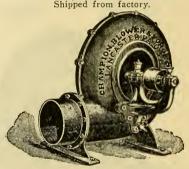
THE CHAMPION FAN BLOWER.

THE CHAMPION EXHAUST FAN.

Shipped from factory.

Shipped from factory.





The Champion Fan Blowers are built especially for use where a large volume of blast is required (instead of great pressure), and are adapted for Steam Boilers, Puddling, and Heating Furnaces, Dry Rooms, Refrigerators and Forge Fires, etc.

The Champion Exhaust Fans as shown above are constructed and especially adapted for ventilating rooms, removing dust from Emery Wheels, Buffing Machines and exhaust smoke from Blacksmith Shops, etc.

The Champion Fan Blower and Exhaust Fan are constructed in the best possible manner from the highest grade of material, and by first-class workmen.

Price List with Sizes, Dimensions, Table of Speed and Capacities of the Champion Fan Blower and Exhaust Fan:

Blower and Exhaust Fan:										
No. Blower and Exhaust Fan	Net Price each	Height in inches	Inside Diameter of Inlet	Inside Diameter of Outlet	Diameter of Pulley	Face of Pulley	Revs. per min. 2- ounce Blast for Boiler Fires	Revs. per min. 4- ounce Blast for Forge Fires	No. of Forge Fires	Sq. ft. of Boil'r Grate Surface Supplied by Blower
1 1 2 3 4 5 6 7 8	\$ 8.00 10.00 13.35 16.65 22.00 29.50 41.25 52.50 60.00	12 15 18 21½ 25½ 29¼ 34 40 45	$\begin{array}{c c} 4\frac{1}{2} \\ 5 \\ 5\frac{3}{4} \\ 6\frac{1}{2} \\ 7\frac{1}{2} \\ 9 \\ 10\frac{1}{2} \\ 12 \\ 14 \end{array}$	$ \begin{array}{c} 3\frac{1}{2} \\ 4 \\ 4\frac{3}{4} \\ 5\frac{3}{4} \\ 7\frac{1}{2} \\ 9 \\ 10\frac{1}{2} \\ 12 \\ 14 \end{array} $	2 16 3 3 3 12 4 14 5 8 6 6 13 8	134 2 225 2 24 3 4 4 4 4 5 6 12	3,300 3,000 2,600 2,300 1,928 1,638 1,410 1,194 1,018 878	4,500 4,000 3,600 3,200 2,682 2,279 1,961 1,662 1,417	1 2 4 6 9 15 18 24 30	3½ 5 6 8 10 14 20 27 36 48 62
8 9 10	100.00	50	16	16	9	82	878	1,417 1,234 1,065	40 52	48 62

THE CHAMPION STEEL PRESSURE BLOWER. Shipped from factory.

For Cupola Forges and Furnaces.



The Champion Steel Pressure Blower is especially adapted for Foundry Cupolas, Furnaces, Machine Shops, Forge Fires, Sand Blast Machines, or any work requiring forcing of air long distances, high pressure or strong blast. In locating Blower always place same as near cupola as possible. Avoid right angles or abrupt turns in blast pipes. Will produce a stronger Blast with same amount of power, than any other Blower.

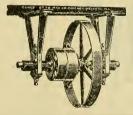
Price List with Sizes and Dimensions of the Champion Steel Pressure Blower:

Height in inches	No. Blower	Net Price without Counter- Shaft	Diameter of Pulley in inches	Face Pulley in inches Inside.	Diameter of Outlet	Diameter in inches Inside of Cupola	Melting Capacity per Hour in lbs.	Speed No. of Rev. for Melting Iron	Pressure of Blast in Ounces	No. Forge Fires	Rev. per Min- ute for Forge Fires
12 15	1 2 3	\$ 8.00 13.50	$\frac{1\frac{7}{8}}{2\frac{1}{2}}$	10101014166120041014 10101014166120041014 101014166120041014	$\frac{2\frac{3}{4}}{3\frac{5}{8}}$::	1 2	4,300 4,200
15 20 24	3	$19.50 \\ 24.00$	3 3	$\frac{2\frac{1}{8}}{2\frac{1}{2}}$	4434-44-56-7-234	22	1,300	4,150	5 6 7	4 6	4,200 4,000 3,725 3,103 2,456 2,224 1,814 1,619
26	4 5	30.00	33.7% - 1977 k 314 m14 m14 m14 m14 m14 m14 m14 m14 m14 m	$2\frac{3}{4}$	5¼	26	2,000 2,900	3,790 3,275 3,050	6	$\begin{array}{c} 9 \\ 15 \end{array}$	3,103
30 35 40 45 53	5	34.00	$4\frac{1}{2}$	$3\frac{1}{8}$	64	30 35	2,900	3,275	7	15	2,456
35	6 7	42.00	47	$3\frac{1}{2}$	$7\frac{1}{2}$	35	4,000 6,000	3,050	.8	$\frac{18}{24}$	2,224
40	7	55.00	54	34	84	40	6,000	2,900	10	24	1,814
45	8	70.00	63	41	$10\frac{7}{4}$ $11\frac{7}{8}$	46 53	8,600 12,300	2,820	12	30	1,619
53,	19	92.00	74	52	114	23	12,300	2,600	14	$\frac{40}{52}$	1,344 1,200
64	10	126.00	9	61	13%	60	16,500	2,270	15	52	1,200

WESTERN CHIEF COUNTERSHAFTS.

Shipped from factory.

For Pressure Blowing, Etc.

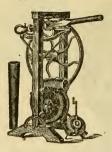


SIZES	Driving	Pulley	Tight and L	oose Pulleys	Diameter	Weight	Net Price
	Diameter Width		Diameter	Width	of Shaft	Weight	each
P 1 P 3 P 5	10¾ in. 14 in. 18 in.	$2\frac{1}{2}$ in. $2\frac{3}{4}$ in. $3\frac{1}{2}$ in.	4 in. 6 in. 7 in.	2 in. 2½ in. 3¾ in.	7 in. 1 in. 1 in.	50 lbs. 60 lbs. 75 lbs.	\$ 6.00 9.00 12.00

CHAMPION LEVER BLACKSMITH

BLOWER.

Shipped from factory.



Fan 16-in., fly-wheel 28 in. in diameter.

Has the capacity of a 50 in. bellows, with patent adjustable nozzle tuyere iron and piping complete.

The mecahnical self-acting and simple lever motion has nothing to get out of order, and is absolutely perfect in its construction, durable and light running, with a continuation of momentum between strokes, keeping the blast regular and powerful. Every blower warranted.

Net price, complete, with patent adjustable nozzle tuyere iron and piping....\$8.25

CHAMPION LEVER FORGE.



No. 151 With Half Hood.

No. 151 Champion Agricultural Lever
Forge with Half Hood. Hearth 18 in.
Diam., 4 in. deep. Fan 8 in. Diam.,
Height 30 in. Weight, 70 lbs.......\$7.00

ACME HAND BLOWER.



Guaranteed to Give a Blast Equal to a 60-in. Bellows.
Sizes. Net price each.
No. 3, without tuyere iron...........\$16.00

THE CHAMPION AGRICULTURAL LEVER FORGE.

Size of Hearth 18 in. in Diameter. Fau 8 in.



No. 150. With Shield.

The Nos. 150 and 151 Agricultural Lever Forges are precisely what illustrations represent them to be. They have been on the market for ten years. A great many have been sold on account of the low price. The Lever motion is operated by three (3) ratchet pawls, with gear segments as illustration shows. They are recommended as the largest Forge for the money ever built. Size of hearth 18 inches in diameter, 4 inches deep. The construction of the two Forges is precisely the same with the exception that the No. 150 has a shield and the No. 151 has Half Hood. They are highly recommended for farmers' use, and for light repair work.

No. 150 Champion Agricultural Lever Forge with Shield. Hearth 18 in. Liam., 4 in. deep. Fan 8 in. Diam., Height 30 in. Weight, 65 lbs.......\$6.00

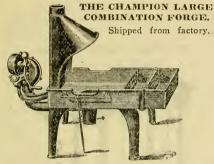


CHALLENGE FORGE.

Shipped from factory.

This Forge has a capacity to heat iron two inches through, and very desirable for all kinds of outdoor work, where a light, strong portable forge is required. It is equipped throughout with Brass Boxes and Oil Cups, also noiseless steel Friction Clutch.

Fan 9 inches. Height, 33 inches. Hearth 22 inches. Weight, 95 pounds. Sizes, No. 4C......Net price, each, \$8.50



The Champion Large Combination Forge shows a new and larger Blacksmith Forge than ever was built heretofore. Finding a demand for a Forge of this magnitude we, as progressors in the improvement of the Blacksmith's wants, have determined to furnish a Forge for the heaviest kind of railroad work, plow work, heavy wagon work, or any blacksmith making heavy work a specialty. This Forge is supplied with a hearth 38 x 52 inches and 6 inches deep for building up with fire

No. 430 Champion Large Combination 430 Champion Large Combination
Blacksmith Forge. Size of Hearth
over all 38 x 52 in., Height 26 in.,
Diameter of Fan 12 in., with Hood
and Water Tank Complete, and No.
400 Champion "Whirlwind" Blast
Anti-Clinker Heavy Nest Tuyere
Iron. Weight, 450 lbs.......\$36.00

No. 431 Champion Large Combination Harmon Large Combination Blacksmith Forge. Size of hearth over all 39 x 63 in. Height, 26 in. Diameter of Fan 14 in., with No. 400 Champion "Whirlwind" Blast Anti-Clinker Heavy Nest Tuyere Iron, also Hood and Water Tank, Complete. Weight, 525 lbs.

Net price each.....\$40.00

No. 432 Champion Large Combination Blacksmith Forge. Size of hearth over all 39 x 63 in. Diameter of Fan 16 in., with No. 400 Champion "Whirlwind" Blast Anti-Clinker Heavy Nest Tuyere Iron, with Hood and Water Tank, Complete. Weight, 625 lbs. Net price, each......\$42.00

CHALLENGE FORGES.



Shipped from factory.

These Forges have a capacity to heat 2-inch iron, and are very desirable for toolmakers, plumbers, tinsmiths, lock-smiths, dentists, and small hardware work, heating and tempering tools, etc.

Fan 91/2 inches. Height, 33 inches. Hearth, 22 inches. Weight, 90 pounds.

Net price each. Sizes. No. 5C....\$9.50

THE CHAMPION STATIONARY BLAST FORGE.

Shipped from factory.

Nos. 12, 12½ and 13½ Cham-Stationary pion Blast Forges are made extra heavy for all kinds of blacksmith fires, far superior to building a Forge of brick or stone,



are made for power, but can be used for hand power or bellows as well. This Forge is supplied with the Champion Blast Gate. Net price each.

No. 12 Champion Stationary Blast Forge. Size of Hearth, over all, with Water Tank, 38 x 52 in., Height

26 in. \$1 No. 12½ Champion Stationary Blast Forge. Size of Hearth, over all, with Water Tank, 39 x 63 in., Height



No. 11. Champion Stationary o. 11 Champion Stationary Blast Forge. Hearth, 32 x 45 in., Height 30 in., with Hood and Water Tank com-

 plete
 \$14.00

 With Hood, less Tank
 12.00

 With Tank, less Hood
 12.00

 Less Hood and Tank
 10.00

CHALLENGE FORGES.

Shipped from factory.



This Forge has capacity for heating 3-inch iron and is especially adapted to the requirements of boilermakers, bridge builders, well drivers, miners, railroad and outdoor work. Has a perfect Tuyere Ball and blast, and size and shape of hearth permits ample room for coal and place to lay tools upon. Everything for the convenience of the workman.

Fan 12½ inches. Height, 30 inches.

Hearth, 35 x 23 inches. Weight, 130 lbs.

Sizes. Net price each.

No. 2C.....\$12.82 CHALLENGE FORGES.

Shipped from factory.



This Forge is adapted to the largest, heaviest work. It has a perfect Fire Pot, with W. C. Goose Nest to securely hold clay; also Tuyere Ball, furnishing side and center blast, all separate and distinct from Hearth, and arranged to withstand the intense heat. It is equipped with Brass Boxes and Oil Cups throughout, also Noiseless Steel Friction Clutch. This Forge can be furnished reverseu, to operate with right arm, for left-handed smiths, when desired.

Fan 14½ inches. Height, 30 inches. Hearth, 33½ x 46 inches. Weight, 300 pounds. Length over all, 54 inches.

CHALLENGE FORGES.

Shipped from factory.

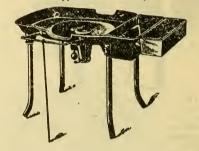


This forge has a capacity for heating 3 inch iron, and is specially adapted to the requirements of machinists, plumbers, railroad repair shops, locksmiths, etc. Has a perfect Tuyere Ball and blast, and size and shape of hearth permits ample room for coal and place to lay tools upon. Everything for the convenience of the worksman

Fan 12½ inches. Height, 30 inches. Hearth 35 x 23 inches. Weight 135 pounds. Sizes. Net price each. No. 3C.\$14.25

WESTERN CHIEF FORGES.

Shipped from factory.



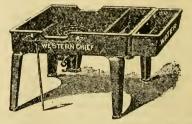
A Stationary Blast Forge of size and construction suitable for all requirements of ordinary shop use. Hearth $33\frac{1}{2} \times 46$ inches. Height 30 inches.

Hearth 33½ x 46 inches. Height 30 inches. Length over all 54 inches.

 Sizes.
 Net price each.

 AA, Plain (1 tank only).
 \$10.40

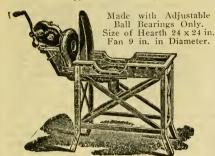
 AA, (extra water tank).
 12.50



Very large, heavy and strong, is cheaper and much handsomer than a brick or stone forge. Sizes. Net price each. BB, Plain (no extra tank).........\$14.55

THE CHAMPION STEEL RIVET FORGE.

Shipped from factory,

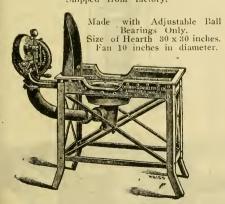


No. 404. With Shield.

Nos. 404 and 405 Champion Steel Rivet Forges have a 24-inch square hearth with angle steel legs riveted fast to hearth, as above cut shows. In construction of machinery for operating the blower in connection with size of fan, this Forge is precisely the same as No. 401. The only difference in the Forges being the hearth on the No. 401 is 18 inches in diameter and on this Forge 24 inches square. For many kinds of work this 24-inch square Forge may be preferable. The hearth being larger, naturally there is more surface for fire, coal, tools.

THE CHAMPION STEEL BOILER-MAKERS' FORGE.

Shipped from factory.



No. 406. With Shield.

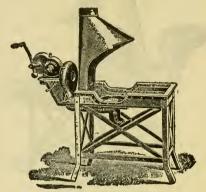
No. 406, Champion Steel Boilermakers'
Forge with Shield. Hearth 30 x 30 in.,
Height 30 in., Fan 10 in. diameter,
Weight 160 lbs. \$24.75
With Water Tank, extra. \$3.00

THE CHAMPION STEEL TOOL-MAKERS' FORGE.

Shipped from factory.

Made with Adjustable Ball Bearings
Only.

Size of Hearth 24 x 24 inches. Fan 9 inches in diameter.



No. 405. With Half Hood.

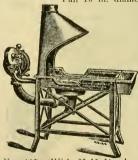
Sizes. Net price each.
No. 405, Champion Steel Toolmakers'
Forge with Half Hood. Hearth 24 x 24
in., Height 30 in., Fan 9 in. diameter,
Weight 120 lbs. \$22.05

THE CHAMPION STEEL MACHINISTS' FORGE.

Shipped from factory.

Made with Adjustable Ball Bearings
Only.

Size of Hearth 30 x 30 in. Fan 10 in. diameter.



No. 407. With Half Hood.

Nos. 406 and 407 Champion Steel Boiler-makers' Forges have a 30 inch Square Hearth and Fan 10 in. In diameter. The light running and noiseless machinery for operating the Blower for producing the Blower for producing the blast is our marvelous highspeed spiral movement, fully described and

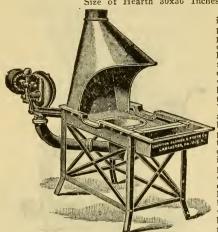
guaranteed on page 45. The powerful blast it produces, with the lightness in operation, can only be appreciated when seen at a fire; there being no belts or friction, with all machinery closed in an oil-tight casing and every journals being fitted up with adjustable ball bearings.

No. 407, Champion Steel Machinists' Forge with Half Hood. Hearth 30 x 30

THE CHAMPION STEEL HORSESHOERS' FORGE.

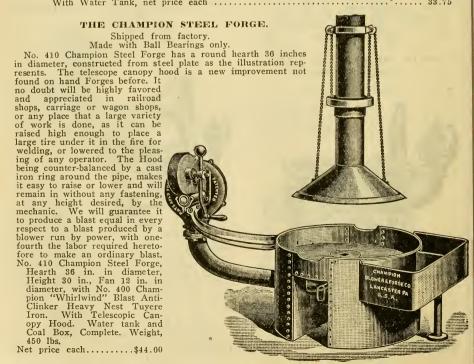
Shipped from factory.

Made with Adjustable Ball Bearings only.
Size of Hearth 30x36 Inches. Fan 12 Inches in Diameter.



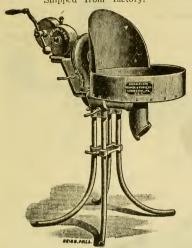
The No. 408 Champion Steel Horseshoers' Forge is virtually the No. 400 Champion Steel Blower on page 42, converted into a most practical and complete up-to-date Horseshoers' or Blacksmiths' Forge ever built. The No. 408 Forge is now on the market in its fourth year and has won for itself friends in all nations, among horseshoers and general blacksmiths. It is built from structural steel with perpendicular sides 6 inches wide, making the hearth 6 inches deep, rendering it in every par-ticular the most practical forge hearth ever built. We recommend the No. 408 Forge as substantial We recommend the No. 408 Forge as substantial and as firm as any blacksmith can build. As will be understood, the Blower used on this Forge is precisely the same as the No. 400 Blower illustrated on these pages, the mechanical construction of this Blower being the highest possible to reach in the construction of machinery. For a full extension of the No. planation of the Spiral Gearing used on the No. 408 Forge read above. The crank turns either direction to make the blast. It will make a white heat blast, guaranteed equal to the best power blast. Its parts are all machine cut from the very highest grade of tool steel and phosphor bronze. Its Ball Bearings are all adjustable and the finest that can be manufactured.

No. 408. With Half Hood.



THE CHAMPION STEEL RIVET FORGE.

Shipped from factory.



Made with Adjustable Ball Bearings Only.

No. 401. With Shield.

Hearth 18 inches in Diameter. Fan 9 inches in Diameter.

No. 401 Champion Steel Forge is truly an ingenious and great invention, for both employer and employe. The marvelous direct drive Spiral High Speed Mechanical Movement for producing a wonderful, regular, continuous and positive blast, with such great ease, can indeed be easily classed as a wonder of the 20th century. Nothing was ever seen to even approach it for a strong, positive, regular blast. The Forge is constructed from structural steel, making it strong, stiff and light. The machinery is all enclosed in an oil-tight casing, and entirely noiseless. It has no belts, no small gears or friction. It is fitted up all through with Adjustable Ball Bearings. It can be taken apart for transportation and again set up for use in a few moments. This Forge is adapted for boilermakers and repairers, Elevated and Steam Railroads, Bridge and Tank Builders, Miners and Prospectors, for Government use, Race Horse Shoeing, or any portable work requiring compactness and lightness, with

Net price each

turned either way.

work requiring compactness and lightness, with a strong blast. If necessary it will produce blast to weld 3½ to 4 inch iron in ten minntes. The crank to produce the blast can be

Nos. 401½, 402½ and 403½ Champion Steel Forges are precisely the same in their entire construction as the Nos. 401, 402 and 403, excepting the Hearth, which is much larger, being 22 inches in diameter.

Nos. 40134, 40234 and 40334 Champion Steel Forges are in their entire construction same as all the above forges, with the exception of a larger Hearth and larger Fan, the Hearth being 24 and the Fan 10 inches in diameter, which makes this a very light and compact Forge for large or heavy work.

No. 401½, Champion Steel Forge with Shield. Hearth 22 in. diameter, Fan 9 in. diameter, Weight 100 lbs......\$18.00

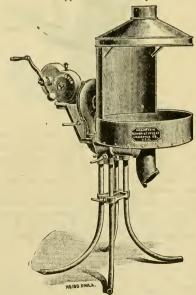
No. 402½, Champion Steel Forge with Half Hood. Hearth 22 in. diameter, Fan 9 in. diameter, Weight 105 lbs.. 19.35

No. 403½, Champion Steel Forge with Full Hood. Hearth 22 in. diameter, Fan 9 in. diameter, Weight 110 lbs.. 20.25

ALL GUARANTEES ON THE NO. 400 STEEL BLOWER APPLY TO THESE FORGES.

THE CHAMPION STEEL TOOL-MAKERS' FORGE.

Shipped from factory.



No. 402. With Half Hood.
Made with Adjustable Ball Bearings Only.
Size of Hearth 18 inches in Diameter.
Fan 9 inches in Diameter.

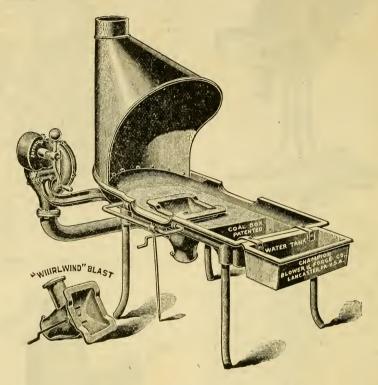
THE CHAMPION CAST IRON HEARTH BLACKSMITH FORGE.

Shipped from factory.

Made with Ball Bearings only.

Size of Hearth 32x45 inches.

Fan 12 inches in diameter.



No. 433. With Half Hood.

No. 433 Champion Cast Iron Hearth Blacksmith Forge is a new Forge and carries with it all the improvements and advantages that can possibly be had in a Cast Iron Blacksmith Forge hearth. The Blower used on this Forge is the Famous No. 400 Champion "Patented" High-speed Spiral Gearing and Blower. The capacity of this Forge is sufficient for any Blacksmith work, and we recommend it for the heaviest as well as the lightest work that is done in a general blacksmith shop. It is supplied with the No. 400 Champoin "WHIRLWIND" Blast Anti-Clinker Heavy Nest Tuyere Iron (shown and described on page 38) without extra cost. It is also supplied with our Champion "Patented" Sloped Bottom Coal Box, which is entirely out of the way, as it is beneath the level of the bottom of the hearth, which is very convenient for keeping the coal in any degree of dampness that the operator desires.

Net price each

ROYAL WESTERN CHIEF FORGE.

Shipped from factory.



No. 100. For use of Large Blacksmith, Wagon, Plow, Railroad Shops, Etc., where Heavy Work is done, and a first-class Forge and Fire are needed.

needed.
Fan, 12 inches. Height, 30 inches.
Hearth, 31½x45½ in. Length over all, 53 in.
Crank Turns Forward or Backward.
Capacity to heat 4-inch iron.
In this Forge we combine our "Royal" style
of Blower with Western Chief Standard
Hearth, having Solid Fire-pot with Tuyere
Ball furnishing side and center blast. We
guarantee it fully.

Net price each With One Tank, weight 295 lbs.......\$22.50
With Extra Tank (as illustrated), weight

325 lbs. (Always shipped WITHOUT EXTRA TANK,

unless so ordered.)

ROYAL STEEL FORGE.

Shipped from factory.



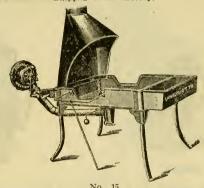
For Horseshoers, Boilermakers, Repair Shops, etc.

Fan, 12 inches. Height, 30 inches.
Hearth, 30x36 in. Length over all, 44 in.
Crank Turns Forward or Backward.
Capacity to heat 4-inch iron.
In this Forge we combine our "Royal" style
of Blower, with Steel Hearth, having Solid

Fire-pot with Tuyere Ball furnishing side and center blast. Net price each Without Tank, weight 195 lbs......\$27.00
With Tank (as illustrated), weight 225 lbs. 29.25
(Always shipped WITHOUT TANK, unless so ordered.)

ROYAL STEEL FORGE,

Shipped from factory.



No. 15.

For Blacksmiths, Wagon and Plow Shops, Etc.

Heavy and Light Work.

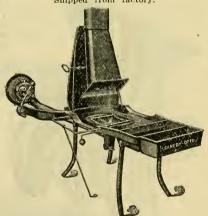
Fan, 12 inches. Height, 30 inches.

Hearth, 30x40 in. Length over all, 48 in. Hearth, 30x40 in. Length over all, 48 in.
Crank Turns Forward or Backward.
Capacity to heat 4-inch iron.
In this Forge we combine our "Royal" style
of Blower, with Steel Hearth, having Solid

Fire-pot with Tuyere Ball furnishing side and center blast. Net price each Without Tank, weight 215 lbs........\$29.25 With Tank (as illustrated), weight 245 lbs. 31.50 (Always shipped WITHOUT TANK, unless so ordered.)

ROYAL WESTERN CHIEF FORGE.

Shipped from factory.



No. 200.
With Improved Smoke Conveyor, Royal Blower and Western Chief Standard Hearth. Fan, 12 inches. Height, 30 inches. Hearth, 31½x45½ in. Length over all, 53 in. Crank Turns Forward or Backward. Capacity to heat 4-inch iron. In this Forge we combine our "Royal" style of Blower with Western Chief Standard Hearth, having Solid Fire-pot with Tuyere Ball furnishing side and center blast. We guarantee it fully. Net price each Ball furnishing side and Net price each guarantee it fully. Net price each With One Tank, weight 300 lbs.......\$24.75 With Extra Tank (as illustrated), weight 27.00

330 lbs.

unless so ordered.)

BUFFALO BENCH FORGES.

Shipped from Factory.









No. 9.

Net price each. No. 7 Height to top of Bowl 15 in. Diam. of hearth 15 in. Fan 6 in. No. 8 Height to top of Bowl 15 in. Diam. of hearth 15 in. Fan 6 in. No. 9 Height to top of Bowl 15 in. Diam. of hearth 15 in. Fan 6 in. Weight 40 lbs.....\$6.40 Weight 42 lbs..... 7.20 Weight 43 lbs..... 8.00

BUFFALO No. 0 PORTABLE FORGE. "The Old Reliable."

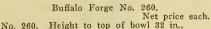
Shipped from Factory.

This forge is especially adapted to the needs of the general blacksmith. Compared to the brick and bellows forge its immense superiority was years ago demonstrated. It heats more quickly and with less labor. Its first cost is less, and in durability and reliability it far exceeds. In fact, this forge has long been known as the "Blacksmiths" Old Reliable." The forge is guaranteed to produce a welding heat on 3-inch iron in five minutes or on 4-inch iron in ten minutes. It saves time, room and money. Satisfaction is assured. For the entire line of lever forges, see following pages. No. 0 may be equipped with direct drive lever gear blower 306.

BUFFALO BLACKSMITHS' FORGE No. 0.

Net price without tank	. \$20.00
Net price with tank	91.60
Height to top of bowl	inches
Size of hearth) inches
Diameter of tan	4 inches
Weight without tank	nounds
Weight with tank	pounds





Diameter of Hearth 18 in., Depth of Bowl 6 in., Diameter of Fan case 9 in.

Weight 125 lbs.......\$14.00 An innovation, readily taken apart and re-

assembled. Cut spur and spiral gears. Made of finest hardened phosphor bronze and Swiss steel, run in oil-cloth, in dust-proof cases. Will produce a welding heat on a 4-inch iron in less than 10

Buffalo Forge No. 240. Net price each.

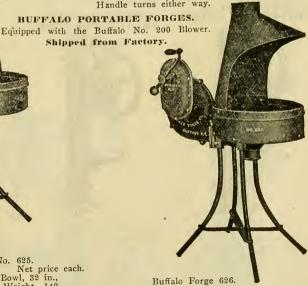
struction.

Strength, Durability, Noiseless, Light Weight,



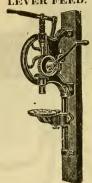
Buffalo Forge No. 625. Net price each. No. 625. Height to top of Bowl, 32 in., Hearth 18 in. diameter, Weight, 140

Forge No. 625 is built especially for rivet heating. All parts detachable, assembled in five minutes. Made of sheet steel, it is practically indestructible.



Net price each.

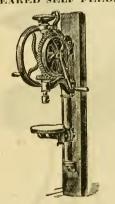
CHAMPION LEVER FEED.



No. 100 Drill

Is designed and built for light and quick work, in-tended to be used as a second drill in all up-to-date shops where tire drilling and countersinking is an object.
Drills to center of 14-inch circle. Spindle has an up and down run of 5 inches.
Drills 0 to 34 inch, takes ½ inch straight shank drills. Weight 100 lbs. Net price each.....\$7.50 Extra for power..... 2.00

SILVER DOUBLE GEARED SELF FEED.



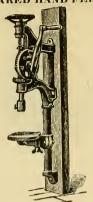
No. 3

Has extension crank and variable feed. Drills 0 to 11/4-inch holes, and to center of 16-inch circle. Drill spin-dle bored for ½-inch straight shank drills. Feed has run shank drills. Feed has run of 3 inches. Upright column drill spindle and feed screw are of best steel. Weight 140 pounds.

Net price each......\$8.50

BLACKSMITHS' DRILLS.

SILVER SINGLE GEARED HAND FEED.

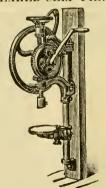


No. 11/2 Drills 4-inch and to center of 12-inch circle. Drill spindle is 1 inch steel, same as No. 2, and bored for 1/2-inch straight drills.

Feed has run of 3 inches. Upright column and feed screws are of best steel.

A good substantial drill, well made of the best materials, and capable of doing the work of more expensive machines. Weight 55 lbs. Net price each......\$4.00

SILVER DOUBLE GEARED SELF FEED.

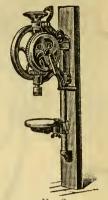


No. 1

Has extension crank and adjustable feed. Drills 34-inch and to center of 12-inch circle. Drill spindles are 1-inch steel, same as No. 2, and bored for 1/2-inch straight shank drills,

Feed has run of 3 inches. Upright column and feed screws are of best steel. Weight 80 pounds. Net price each......\$5.50

SILVER DOUBLE GEARED SELF FEED.

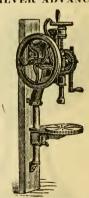


No. 2

Has extension crank and adjustable feed. Drills 0 to 1-inch holes, and to center of 14½-inch circle. Drill spindle bored for ½-inch straight shank drills. Feed has run of 3 inches. Upright column, drill spindle and feed screw are of best steel.

Weight 100 pounds. Net price each.....\$6.50

SILVER ADVANCE.



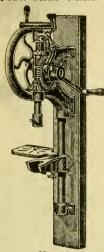
No. 12 Drill

Size of spindle 1 inch, run of spindle 3 inches, size of column 116 inch, greatest distance of spindle to table 141/4 inches. Fast and slow speed. Drill to center of 15inch circle, and up to 11/4-inch holes. Spindle bored Spindle hored 1/2-inch round shank for drills.

Weight 125 pounds. Net price each.....\$7.00 Extra for power.....2.00



Net price each Blacksmiths' Bench Drill\$1.60 CHAMPION SELF-FEED DRILL.



No. 90.

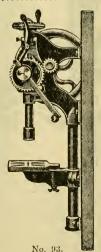
Self-feed, will drill to center of a 14½-inch circle. It has but one speed, has back gears and will drill a hole from 1-64 to 1 inch. The bearings are all ground to a working fit out of solid metal. Spindle is bored to take in ½-inch straight shank drills. Weight 100 pounds.

Net price each\$6.50 Extra for power 2.00

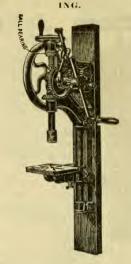
CHAMPION SELF-FEED DRILL.

Drills to center of 15 inch circle. Has Double Journal Bearings to all working parts. Has full Has two back gear. speeds. Drills 1-64 to 11/4 inch hole. Diameter of spindle 11/8 inch and up and down run of 3 inches. Spindle bored to take in 1/2-inch straight shank drills.

Weight 125 lbs. Net price each \$8.00 Extra for power.... 2.00



BLACKSMITHS' BENCH DRILL. THE NEW CHAMPION BALL BEAR-



Self-Feed Blacksmith Post Drill.

Drills to center of a 16-inch circle. Weight 130 pounds. It is back geared, with our improved third-gear principle, which gives the second speed the same crank motion as on the first speed. Has double journal bearings to all working parts. Has spindle 1½ inch in diameter. This screw has an up and down run of 3½ inches. The spindle bored to take in ½-inch straight shank drills. Will drill from 1-64 to 11/4 inch hole.

Net price each\$9.00 Extra for power 2.00

LITTLE GIANT.

A Strong, Serviceable Drill.

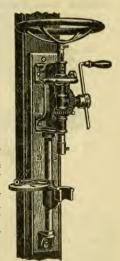
Compact and thoroughly well made machine in every particular. Guaranteed to give satisfaction.

> General Dimensions.

Drills to 1 in. diameter hole. Drills to center of 14-inch circle. Swinging table easily adjustable to height.

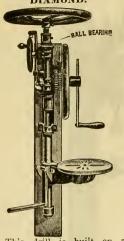
Spindle is made of steel, and has Tool Steel Set Screw hardened and tempered. Spindle receives 1/2inch shank drills.

Weight 90 pounds. Net price each, \$7,25



No. D-5,

CHAMPION NEW BALL BEARING BLACK DIAMOND.

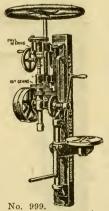


This drill is built on a new and scientific principle, being a tool with merits worth looking into by all who are in want of a large and well-made Blacksmith Drill The graving is do Drill. The gearing is designed for easy and quick running, being compounded for increasing power.

Drills to center to 18-inch circle from 0 to 1½ inches.

Weight 200 pounds. Net price each.....\$15.50 Extra for power..... 2.00

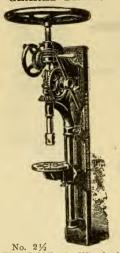
CHAMPION IMPROVED CUT GEARED. Shipped from Factory.



Quick or slow motion is given to spindle. Drills to center of 16-inch circle, holes from 0 to 1½ inch. Weight 200 pounds.

Net price each\$21.00 Extra for power..... 3.25

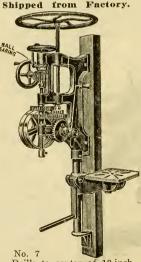
BLACKSMITHS' DRILLS. CHAMPION SINGLE GEARED DRILL.



The Self-Feed Wheel entirely free from the hand feed wheel. Drills to center of 14-inch circle, from 1/8 to 1 inch hole.

Weight 130 pounds. Net price each.....\$12.00 Extra for power..... 2.00

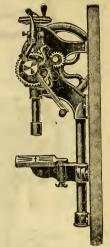
CHAMPION IMPROVED CUT GEARED.



Drills to center of 19-inch circle, from 0 to 1½ inch hole, takes ½-inch round shank drills.

Weight 300 pounds. Net price each.....\$25.00 With $10x2\frac{1}{2}$ Pulleys.. 2.50

CHAMPION SELF FEED DRILL.



No. 93½
This drill in dimensions and general construction is same as No. 93, except the gearing is not protected with Double Journal Bearings and for this reason. ings, and for this reason is sold for less money.

Weight 115 pounds. Net price each \$7.50 Extra for power 2.00

THE CHAMPION NEW BENCH DRILL.



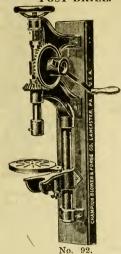
Has adjustable bed plate

26½ inches high. Weight 34 pounds. Drills up to ½ inch feed, has a run of 3½ inches. Crank can be lengthened

or shortened.

It takes 3% round square shank drill bits. Net price each......\$5.00

BLACKSMITHS' DRILLS. THE CHAMPION HAND FEED POST DRILL.



Will drill to center of a 14-inch circle, and hole 1-64 to 34 inch. The shaft is made of 1 inch steel and has an up and down run of 3 inches. Spindle is bored for ½ inch straight shank drills. Weight 65 lbs.

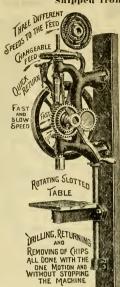
Net price each \$4.15

NEW IMPROVED CHAMPION DRILL, BALL BEARING, Shipped from Factory.



No. 4.

WESTERN CHIEF. Shipped from Factory.



No. 1.

Why it is the Best.

1st. It has three changes of speed to the feed—slow, medium and fast.

2d. It takes less time to change the feed than it takes to tell about it.

3d. Quick return the best yet; a movement of the finger does it.

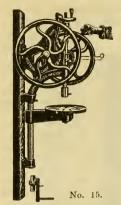
4th. — It has two changes of speed, fast and slow — one for light medium work and one for heavy work. The change is made in an instant, without changing the handle, and no backward movement.

Drills to center of 15 inch circle, from 0 to 1½ inch hole. Takes ½ inch round shank drills.

Net price each.....\$11.50 Extra for power......2.00

THE CHAMPION SELF-FEED POST DRILL.





WESTERN CHIEF DRULS. Shipped from Factory.

Back Cut Gears. Geared. Self-feed. Changeable Speed. Drills to center of 19-in. circle. Bores 0 to 1½ inches. Up and down run of Spindle 4 inches. Up and down run of table, 1134 in ches. Greatest distance from table to Spindle, 131/4 inches.

Size of pulleys, 8 x 2 ½ inches. Should run 200 revolutions per min-

No. 15. utc. Spindle bored for ½ or 41-64 in. shank bits. ALWAYS STATE SIZE WHEN ORDERING.

Weight, Hand Power, 180 lbs. Hand and Power, 190 lbs.

It has two speeds, fast and slow, and for heavy drilling the slow speed is instantly obtained by inserting the crank handle in rim of

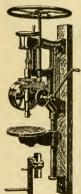
fly wheel.

The shaft on this drill (when ordered Hand Power) is left extended, to receive pulleys at

any time thereafter.

Wheel Rims can be drilled by removing the table and using the forked support as a Wheel Holder. A special Wheel Holding Attachment, as illustrated, is furnished, when desired for \$1.35 extra.

Net price each. Hand Power (as illustrated)......\$13.75 Hand and Pulley Power.....\$15.50 wheel Holding Attachment \$1.35 extra.



Cut Gears Only, Used in this Drill.

DESCRIPTION.

Automatic Self-feed. Fast and Slow speed, instant change. Drills to center of 10-inch circle. Bores 0 to 11/2 inches. Up and down run of Spindle, 4 inches. Up and down run of Table, 15½ inches. Greatest distance from Table to Spindle, 16 inches. Size of Pulleys for 103/4×21/2 inches. power. Should run 175 to 180 revolutions per minute. Spindle bored for ½ or 41-64 inch shank bits. ALWAYS STATE SIZE WHEN ORDERING.

Weight, Hand power 215 lbs; Weight, Pulley power 235 lbs.

No. 12. The shaft on this drill (when ordered hand power) is left extended to receive pulleys any time thereafter.

Wheel Rims can be drilled by removing table and using forked support as a wheel holder. A Special Wheel Holder Attachment, as illustrated is furnished, when ordered, for \$1.35 extra. Net price each.

Without Pulleys, Hand Power Only....\$18.75 With Hand Power and Pulley Power Attachments (as illustrated) 22.00



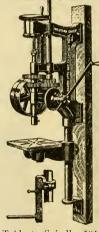
A first-class Drill at a very reasonable price. Self-feed, with three different speeds to feed; slow, medium and fast. Double Geared for slow or fast speed. Slotted, rotating, swinging Table. Drills to center of 15-inch circle. Bores 0 to 1½ inches. Up and down run of Spindle, 3¼ inches. Up and down run of Table, 13 inches. Greatest distance from Table to Spindle 13 inches. Size of pul-leys for power, 8x2 /s inches. Should run 200 revolutions per minute. Spindle Bored for ½ or 41-64 inch shank bits. ALWAYS STATE SIZE WHEN ORDERING.

Weight, 125 pounds. Wheel Rims can be drilled by removing table and using forked support as a wheel holder.

No. 7.

Cut Gears Only, Used in this Drill.





Automatic Self-feed. Fast and slow speed, instant change. Drills to center of 21-inch Circle. Bores 0 to 11/2 inches. Up and Down run of Spindle, Up and inches. Down run of Table, 161/2 inches. est distance from

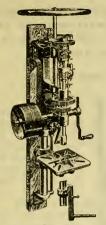
Table to Spindle, 19½ inches. Size of Pulleys for Power, 10¾x2½ inches. Should run 175 to 180 revolutions per minute. Spindle bored for ½ or 41.64 in. shank bits. ALWAYS STATE SIZE WHEN ORDERING.

Weight, Hand power.......275 pounds Weight, Pulley power.......295 pounds

The shaft on this drill (when ordered hand power) is left extended to receive pulleys any time thereafter.

Wheel Rims can be drilled by removing table and using the forked support as a wheel holder. A special Wheel Holder Attachment, as illustrated, is furnished, when ordered, for \$1.35

Net price each, Hand Power only \$23.00 With Pulley 25.50



No. 14 Description

Straight and Bevel Gears are Cut, Fast and slow speed, instant change. Horizontal, Gear driven, positive self-feed, changeable instantly to fast, slow or medium, as desired. Raise and lower device to table.

It has automatic quick return, allowing rapid with-drawal of the bit at will, without stopping or reversing machine. Or, it can be set to drill any depth desired and will automatically (whether running by power or hand) reverse itself, withdraw the bit and start drilling again and again indefinitely, all without stopping the motion of the machine.

Drills to center of 21-inch circle, bores, 0 to 1½ inches. Up and down run of spindle, Up and down run of spindle, 4 inches. Up and down run of table, 16½ inches. Greatest distance from table to spindle, 18 inches. Size of pulleys, 10¾x2½ inches. Should run 175 to 180 revolutions per minute. Spindle bored for ½ or 41-64-inch shank bits. Always state size when ordering.

Weight (hand power) 295 lbs. Weight (hand and power) 315 lbs.

Wheel rims can be drilled by removing table and using the forked support as a wheel holder. A special Wheel Holder Attachment, as illus-trated, is furnished, when ordered, for \$2.00 extra.

Net price each. Hand power only....\$26.00 Both hand power and

pulley 28.00 Wheel holder attachment, \$1.35 extra.

WESTERN CHIEF DRILLS. Shipped from Factory.



No. 16

Description A Post Drill with the fine Features of Machine Shop Floor Drills.

Straight and bevel gears are cut. Fast and slow speed instant change. Hand lever feed, also horizontal geardriven, positive self-feed, changed to fast, slow or medium speed instantly. These feeds work independent of each other and bit is lifted enabled. is lifted quickly.

Raise and lower device to table. Drills to center of 24-inch circle. Bores 0 to 11/2 inches. Up and down run of spindle, 8½ inches. Up and down run of table, 15½ inches. Greatest distance from table to spindle, 181/2 inches. Size of pulleys, 1034 x2½ inches. Should run 175 to 180 revolutions per minute. Spindle bored for ½ or 41-64-inch shank bits. Always state size when ordering.

Weight (hand power) 340

Weight (hand and power) 360 lbs.

Wheel rims can be drilled by removing table and using the forked support as a wheel holder.

When ordered hand power only, the shaft is left extended, so that pulleys may be

placed at any time. Net price each. Hand power only....\$30.00 With pulley 32.00 Special wheel holder attachment, \$2.00 extra.



No. 17

Description

A Finished Floor Drill, both Hand and Pulley Power.

Straight and bevel gears are cut. Fast and slow speed, instant change. Hand lever feed, also horizontal Driven, positive self-feed, changed to fast, slow or medium instantly. These feeds work independently of each other, and bit is lifted quick-

Raise and lower device to table. Drills to center of 24-inch circle. Bores 0 to 11/2 inches. Up and down run of spindle, 8½ inches. Up and down run of table, 15½ inches. Greatest distance from table to spindle, 181/2 inches. Height of machine, 71 inches. Floor space, 15x 26 inches. Size of pulleys, 10 \(\frac{3}{4}\)\(\frac{2}{2}\)\(\frac{1}{2}\) inches. Should run 175 to 180 revolutions per minute. Spindle bored for 1/2 or 41-64-inch shank bits. Always state size when ordering.

When specially ordered we will bore Spindle to receive No. 3 Morse Taper.

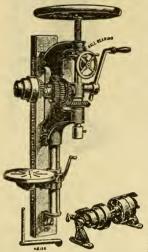
Weight 560 lbs.

Wheel rims can be drilled by removing table and using forked support as a wheel holder. Special Wheel Holder Attachment can be furnished for \$2.00 net. Hand and Pulley Price,

Power (as illustrated) Net price each.....\$40.00

THE CHAMPION No. 25 NEW BACK-GEARED AUTOMATIC SELF-FEEDING POST DRILL.

Shipped from Factory.



For Power or H a n d, or H a n d and Power Combined.

Made with

Made Cut Gears and Ball Bearings. No. 25 Champion Automat-i c Self-Feed Post Drill is a practical, upto-date tool for all kinds of drilling. It is a single or double backgeared Drill which can be changed from one to the other in an instant As the illust ration will show, the gears turn or revolve in the same direction

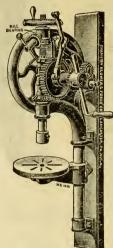
that the crank is turned, which adds to light running and momentum of the gears. We recommend this Drill for all kinds of work, drilling holes from 0 to 1½ inches. The independent countershaft, with three step-cone pulley to give the Drill different speeds, is of great advantage for a Power Drill. As a Hand Drill it carries our highest recommendation for ease of operation and the large range of work it will do. The only Drill far more superior with the gears running the same way is the No. 220 Champion "Patented" Combination Lever and Automatic Self-Feed. This drill is built with Double Back Gears which can be changed from double to single gear in an instant and with Ball-Bearings only, and is strictly high-grade in every respect. The Automatic Self-Feed is complete and practical; the Hand-Feed Wheel, or Quick-Return Wheel, meets many demands for quick work, for Machine Shops, Carriage Builders, Railroad Shops, Blacksmith Shops, etc. The Wheel Hanger is a valuable addition for Carriage Builders, avoiding scuffing of painted wheels, etc. Its spindle is bored like Never Slip or Kant Slip Chuck to take in 41-64 inch straight shank drill bit. If specially ordered will be bored for ½ inch straight shank drill bits. Drills from 0 to 1½ inch holes. It drills to the center of 22-inch circle; the feed screw has an up-and-down run of 6¼ inches.

No. 25 Champion New Back-Geared and Cut-Geared Automatic Self-Feed and Ball Bearing Post Drill. Drills to the center of a 22-inch circle. With Cone Pulley and Countershaft. Complete for Power and Hand. Weight 440 lbs.\$34.00 No. 25 New Back-Geared Drill with Tight and Loose Pulleys Complete for Power and Hand. Weight 350 lbs... 27.00

No. 25 New Back-Geared Drill, for Hand only. Weight 325 lbs...... 25.00

THE No. 5 CHAMPION 20-inch SWING THREE-GEAR BALL-BEARING UP-RIGHT SELF-FEED BLACKSMITH POST DRILL.

Shipped from Factory.

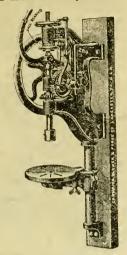


The No. 5 Cham-20-inch Swing pion Three-Geared Ball-Bearing Upright Self-Feed Blacksmith Post Drill. with Ouick-Return and Hand-Feed Handle is an entirely new acquisition Blacksmith Drills. It is a well-made and practool. designed for a great variety of work. Its 20-inch swing makes it a Drill in a class of its own as a first-class medium-priced Drill, as the large swing

enables work of much larger range to be drilled. It is possible that a single job that could not be reached by a drill with a smaller swing would pay for this Drill or at least the difference in the cost of a smaller swing drill. This Drill is both light running and powerful. It is built for light as well as the heaviest work. It has full back gear, with our latest improved third gear principle, which gives the second speed the same crank motion as on the first speed. Our improved third gear being part of the handle hub, it is therefore disengaged when using the first speed, saving the continuous labor of pulling along an inter-mediate gear while using the first speed, and the first speed is used for at least 90 per cent. of the drilling in the average blacksmith shops. This Drill is supplied with our latest Improved Automatic Self-Feed. The Ball Bearing in power and friction when will save drilling from 20 to 50 per cent, the larger the hole the more saved. The Quick-Return Handle enables the mechanic to get the bit out of the work quicker and far more easily than by the use of the top or ratchet wheel. The Quick-Return Handle is also very useful to feed by hand for holes up to ½ inch, especially if the drill is run by power. It drills to the center of a 20-inch circle. Diameter of spindle 1¼ inches. It has an up-and-down run of 5 inches. Spindle is bored like Never Slip or Kant Slip Chuck to take in 1/2-inch straight shank drills. If specially ordered, bored to take in 5% or 41-64. It drills holes from 1-64 to 1½ inches.

THE No. 200 NEW CHAMPION "PAT-ENTED" COMBINATION AUTOMATIC TED" COMBINATION AUTOMATIC SELF-FEED AND LEVER-FEED UPRIGHT POST DRILL. Shipped from Factory.

No. 200 Cham-pion "Patented" Combination Atuomatic Self-Feed and Lever-Feed Upright Post Drill is the smallest size Lever-Feed and Self-Feed Drill we manufacture. In its general c onstruction however, it represents first-class w o r kmanship and is sold at a price with in reach of all. Therefore, the small blacksmith as well as the large manufacturer can enjoy the savings and great advantages of the Champion "Patented" Automatic Self-



Feed and Lever-Feed. This drill is also very easy running as all the end friction is taken from the Drill Spindle by the

use of Ball Bearings.

The great advantages obtained from the Champion "Patented" Automatic Self Feed and Lever-Feed are the time and labor saved by the instantaneous raising of the drill bit out of the hole just bored and again instantaneously replacing the drill bit back on the material ready to bore the next hole. These advantages are the same in both the Self-Feed and Lever-Feed and save in time and hard work, at least, 95 per cent. as there is no turning backwards of the Feed Screw Nut to get the Drill bit out of the work with either Feed.

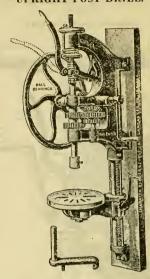
As illustration shows, the Lever is adjustable, which gives the operator the advantage of more or less leverage to suit the work being done. The lever is especially profitable for boring small holes, countersinking and reaming. It also makes a perfect wood bor-

ing machine for a blacksmith shop.

This Drill has Double Back Gears. Has two speeds. The crank on the second speed turns the same direction as the first speed and drills to the center of a 16-inch circle. The spindle has an up-and-down run of 4 inches. Has a spindle 1½ inches in diameter. Is bored like Never Slip or Kant Slip Chuck to take in ½ inch straight drill bits. When specially ordered will be bored to take in 5/8inch or 41-64 inch straight shank drill bits. Will drill holes up to 1¼ inches. Net price each No. 200 Champion "Patented" Combination Automatic Self-Feed and Lever-Feed

Upright Post Drill has Ball Bearings and Foot Power Feed furnished complete for this Drill, extra

THE NO. 201 CHAMPION "PATENTED" COMBINATION AUTOMATIC SELF-FEED AND LEVER-FEED UPRIGHT POST DRILL.



Shipped from Factory. Made with Cut Gears and Ball Bearings Only.

No. 201 Champion "Patented" Combination Automatic Self-Feed and Lever-Feed Cut Geared Upright Post Drill represents our latest improvements and the finest and highest grade workmanship that can be placed on a Drill. It is a strong and powerful built tool with machine Cut Double Sliding Back Gears for quick and slow speed, or for light and heavy work. The changing of the gears from slow speed to fast speed is accomplished in an instant. All end friction is taken from the Drill Spindle by the use of Ball Bearings and, in every respect, this Drill represents our best workmanship.

The workmanship on this Drill in its entire construction is our very best with cut gears and ball bearings. Drills to the center of a 21-inch circle. Spindle has an up and down 21-inch circle. Spindle has an up and down run of 5½ inches. Has two speeds which are changed from one to the other by changing the gears. Has spindle 1½ inches in diameter. Spindle bored like Never Slip or Kant Slip Chuck to take in ½-inch straight shank drill bits. If specially ordered will be bored to take in ½-inch or 41-64 inch straight shank drill bits. Prills helge from 0, to 11½ inches. bits. Drills holes from 0 to 11/2 inches.

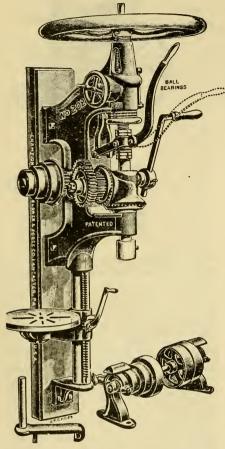
Net price each. No. 201 New Combination Champion "Patented" Combination Automatic Self-Feed and Lever-Feed, Double Back Cut-Geared, Upright Post Drill, with Ball Bearings. Drills to center of a 21-inch Circle. Weight 325 lbs.....\$25.00

Extra for Tight and Loose Pulleys for 2.50 Foot Power Feed furnished complete for

3.00 this Drill, extra

202 CHAMPION "PATENTED" COMBINATION AUTOMATIC SELF-FEED AND LEVER-FEED DOUBLE BACK-GEARED UPRIGHT POST

Shipped from Factory.



Made with Cut Gears and Ball Bearings only. One-third time saved in drilling by the use of the different Feeds.

Bit is raised out of the work instantaneously by counter-balance.

Has rack for raising or lowering the table. A great advantage in this Combination Feed Blacksmith Drill is that it is not only a Drill for drilling iron and steel, but with its Lever-Feed makes it the most perfect Wood-boring Machine ever manufactured.

The Ball Bearings save from 20 to 50 per

cent. in power.

No. 202 Champion "Patented" Combination Automatic Self-Feed and Lever-Feed Upright Post Drill is the heaviest and most powerful Cut-Geared hand or hand and power Post Drill manufactured. As illustration shows, it has Double Back Gears which run in the same direction that the crank turns, giving the running of the Drill the benefit gained in the momentum of the gears. It will also be seen that the Bevel Gears are connected to the Drill spindle as close to the Drill-bit as possible and in connection with this all friction is taken from the Drill spindle by the use of Ball Bearings, making this extremely heavy drill a very light running drill suitable for the lighest as well as heaviest kind of work. The gears for heavy or light work, or from single to double gears, are changed in an instant by the simple sliding of the gears.

The Champion "Patented" Automatic Self-Feed and Lever-Feed on this Drill gives all the advantages of the instantaneous raising of the drill bit out of the hole bored and again instantaneously replacing the drill bit back on the material ready to drill the next hole, which saves at least 95 per cent. in time and hard work over and above any other principle of hand drilling. Do not forget there is no turning backwards of the feed screw nut when drilling with either the Self-Feed or Lever-Feed.

The Lever is adjustable which gives the operator the benefit of different leverages for different kinds of work, and is very profitable for drilling small holes, reaming, counter-sinking, and makes the drill a perfect wood-boring machine. The Automatic Self-Feed and Lever-Feed are entirely independent of each other, the change from one to the other requiring but small fraction of a second.

This drill is supplied with our latest designed Automatic Self-Feed which gives a cutting clearance to the drill-bit, and makes drilling easier, ance to the drill-bit, and makes drilling easier, quicker, and gives longer life to the drill-bit. The Foot-Power feed can be had if specially ordered, and is quite convenient for many kinds of work, especially drilling tires and duplicate work of the same order.

This drill as will be seen by illustration is with three-speed Cone Pulley and Countershaft, which gives every advantage that can be had in a power drill. It can also be had with Tight and Loose Pulleys if desired. This drill is supplied with rack for raising and lowering the table, which stops at any point, is quick in action, and never sticks. The rack never gets in the way for drilling as it turns with the table entirely out of the way. The wheel hanger for drilling tires is also furnished, which prevents the scuffing of painted wheels.

The spindle is like Never Slip or Kant Slip Chuck bored to take in 41.64 inch straight shank drill bits; if specially ordered will be bored to take in ½-inch shank drill bits. Drills to center of a 22-inch circle. Drills holes from 0 to 11/2 inches. Feed screw has an up-anddown run of 6 inches.

Net price each.

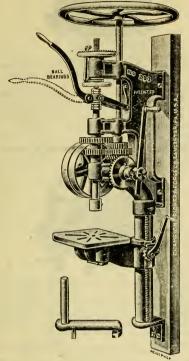
No. 202 New Champion Combination Cut-Geared and Double Automatic Self-Feed Back Geared and Feed Upright Post Drill, has Cut Gears and Ball Bearings, Drills to the center of 22-inch Circle, with Cone Pulleys and Countershaft complete, for Power and Hand Combined, Weight 440 lbs..\$45.00

No. 202 Drill same as above, for Hand and Power combined, with Tight and Loose Pulleys for Power, Weight 340

No. 202 Drill same as above, for Hand only. Weight, 325 lbs...... 36.00 Foot Power Feed furnished complete for this drill, Extra

No. 203 CHAMPION "PATENTED" COMBINATION CUT-GEARED AUTO-MATIC SELF-FEED AND LEVER-FEED UPRIGHT POST DRILL.

Shipped from Factory.



MADE WITH CUT-GEARS AND BALL BEARINGS ONLY.

No. 203 Champion "Patented" Combination Automatic Self-Feed and Lever-Feed Upright Post Drill has Cut Gears and represents every invention and effort that the human mind and mechanical ingenuity can place into a machine for drilling metal either by hand or by power.

REMEMBER that, with either the Self-Feed or Lever-Feed, there is no turning backwards of the Feed Screw Nut to get the bit out of the Hole. The bit always raises and lowers instantaneously and saves at least 95 per cent. In time over and above any other principle of doing the same work on hand Drills, which means also the saving of the hardest manual labor involved in drilling.

In connection with the above Automatic Self-Feed and Lever-Feed, we furnish a Foot Power Feed as shown on pages 124 and 125, which is a very practical Foot Power Feed, for many kinds of work, especially tire and similar drilling.

The Table of this Drill is raised and lowered by the use of a rack, which is quick in action, and never sticks or gets out of order. The Drill is furnished with a Wheel Hanger for drilling tire, which prevents the scraping of painted wheels. This Drill has two speeds which are changed from single to double gear for heavy to light work in an instant. The

workmanship on this Drill in its entire con-

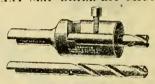
struction is our very best.

It drills to center of a 21-inch circle. The spindle is bored like Neverslip or Kant Slip Chuck to take in 41-64 inch straight shank drill bits. If specially ordered, will be bored to take in ½-inch straight shank drill bits. The pulley for power is 10x2½ inches. Speed for ordinary work 180 revolutions per minute. Feed screw has an up and down run of 5½ inches. Will bore holes from 0 to 1½ inches.

No. 203 New Champion "Patented" Automatic Self-Feed and Lever-Feed Upright Post Drill with Cut Gears and Ball Bearings, drills to the center of a 21-inch Circle, with Cone Pulley and Cone Countershaft, complete for Power

THE CHAMPION NEVER SLIP OR KANT SLIP DRILL BIT CHUCK.

this Drill, Extra



The Champion Never Slip or Kant Slip Drill.

Bit Chuck accomplishes what users of blacksmith drills have wanted for many generations.

It holds the drill bit tight and firm without the
use of a set screw to keep it from turning. No
more twisting off of set screws to try to keep
the drill bit from turning in the drill chuck. In
the Never Slip or Kant Slip Drill Chuck the set
screw is only required to hold the drill bit from
dropping or falling out of the chuck.

It will be seen that it is necessary to file an offset at the upper end of the drill bit shank as shown above, which requires about five minutes for each drill bit. The Never Slip or kant Slip Drill Chuck represents in every detail the old style chuck for holding round shank drills; the Never Slip or Kant Slip invention is only an addition to the upper end of the chuck.

SPECIAL NOTICE.

All Spindles in Champion Drills from the largest to the smallest will, in the future, be bored like the Never Slip or Kant Slip Drill Bit Chuck addition WITHOUT EXTRA CHARGE.

No. 1 Champion Never Slip or Kant Slip

Drill Chuck will fit all Champion Drills with ½-inch shank and take in 5% or 41-64 inch straight Shank Drill Bits..\$1.50

No. 2 Champion Never Slip or Kant Slip Drill Chuck will fit all Champion Drills with 5% or 41-64 inch shank, and take in ½-inch straight Shank Drill Bits..... 1.50

BLACKSMITHS' TIRE BENDERS.



No. 1.

No. 2 and 21/2.

Sizes. Net price each. No. 1, will bend 3¼ inch tire or smaller. \$4.25 No. 2, will bend 3¼ inch tire or smaller. 5.00 No. 2½ will bend 6 inch tire or smaller. 6.00 Note .- No. 1 is made with turned rollers

and bearings; will bend to a circle 30 inches diameter or larger. No. 2 and 2½ are made with gear and pinion.

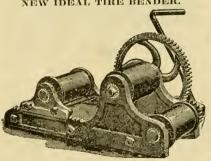
BLACKSMITHS' TIRE BENDERS.



No. 3. Extra Heavy.

This machine is double geared, has turned rollers and bearings, is very strong and durable, and will bend 5 inch Tire or smaller to a circle, 30 inches or larger. In bending very heavy tire two cranks may be used on opposite sides, thus giving double power. Net price, with one crank.....\$7.25

NEW IDEAL TIRE BENDER.



No. 2.

Net price each\$8.00

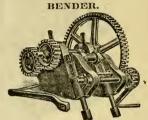
Note .- In offering the New Ideal Tire Bender we believe the merits of the machine will at once commend themselves to all. Tire bending on any of the old style benders has always been "back breaking" work. The Ideal Tire Bender with Roller Bearings will now make tire bending a pleasure. Over 50 per cent of power is saved. You cannot afford to continue using the old style Bender, time and strength are too valuable. It will bend tire up to 6 inches wide to a circle of 30 inches or larger.

THE NEW PATENT CHAMPION TIRE BENDER.



The New Patent Champion Tire Bender is constructed with all the new improvements. Will bend from a fifth wheel to any size up to 3x3/4 inch. Its adjusting roll has an adjusting screw at each end, with a graduated indicator on each side of the bender, showing the exact size of the tire being bent, giving all the benefits of bending perfect tires from imperfect rolled iron. Weight 110 pounds. Net price each

THE NEW PATENT EUREKA TIRE

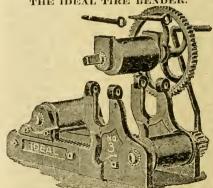


It is a strong and powerful tool, built with the latest improvements, adjusting screws at each end of the adjusting roll with a graduated indicator on each side of the bender showing the exact size of the tire being bent, giving the operator full control of the work. bend fifth wheels as well as large tire.

Net price each. No. 1 will bend 4x1 inch tire, weight 180 pounds No. 2 will bend 6x11/2 inch tire, weight

300 pounds

THE IDEAL TIRE BENDER.



With Roller Bearings.

which will enable the tire being removed after bending, or a tire can be put in the machine after it has been welded, and rolled to a true circle.

NEW PATENT GIANT TIRE BENDER.

Shipped from Factory.



This illustration represents our New Patent Giant Tire Bender with the latest improvements for adjusting the roll. A very important and valuable improvement for this bender, overcom-ing all former troubles of bending irregular iron. The adjusting roll is adjusted by a screw at each end of the roll, with a graduated in-dicator on each side of the bender showing the exact size of the tire being bent, giving the operator entire control of his work, dothe operator entire control of his work, doing away with the unpleasantness of having the tire coming out twisted and not meeting at the ends. The center roll pulls out the same as the Old Style Giant. All rolls are supplied with collars. It has two speeds, one fast for light tires, the second for heavy work.

Net price each.

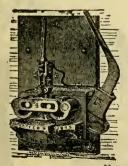
No. 3 bends 3x34 inch tire, weight 175 No. 2 bends 3x1 inch tire, weight 236 pounds 15.50

No. 1 bends 5x1 inch tire, weight 330

375 pounds 23.00

STODDARD'S LIGHTNING TIRE UPSETTER.

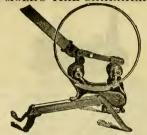
The Old Reliable.



Net price each. o. 1 is a 2 inch machine.........\$5.75
Will upset a tire from 1/8 to 3/4 inch
thick and any work up to 2 inches.

Has two sets of loose jaws, can be adjusted for large and small circles and also for upsetting axles up to 134 inches thick.

MOLE'S TIRE SHRINKER.



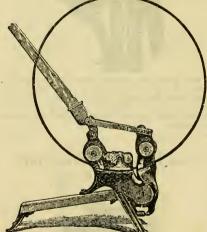
The Simplest and Most Durable Tire Shrinker Made.

It is the only tire Shrinker that can be operated successfully by one man. The operation of bringing down the lever grasps the tire and does the work, raising the lever opens it. By this means it is not necessary to remove the tire until it is upset as much as required. It is especially made for heavy wagons and truck tires. It is very powerful, having a long lever. Net price each.

No. 2 Shrinker, bed 3 inches, weight 225 pounds\$ 8.50

No. 3 Shrinker, bed 4 inches, weight 300 pounds 10.25

MOLE'S IDEAL TIRE SHRINKER.



Particularly adapted for truck tire, and will shrink tire with a 2-foot 10-inch circle and larger. The advantages of the Ideal Mole are: The tire cannot shrink.

It will shrink light buggy tire, heavy wagon tire and truck tire. The cost is but a little more than an ordinary shrinker, but, being adapted for all sizes and thicknesses of tire, it is cheaper than any other. Every machine tested and warranted against breakage for one year:

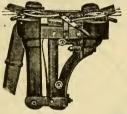
Net price each. No. 2 Shrinker, bed 3 inches, weight 275 pounds\$11.25

No. 4 Shrinker, bed 4 inches, weight 350 pounds 16.75

THE CHAMPION TIRE SHRINKER.



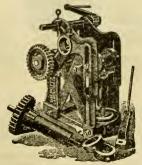
THE LANCASTER TIRE AND AXLE SHRINKER.



The Lancaster Tire and Axle Shrinker is heavy, strong and powerful, is built only in one size. Weight 200 pounds. Shrinks tires all sizes up to 4x1 inch, or $1\frac{1}{2}$ inch axle. Is guaranteed to satisfy the most exact and severe tool critic.

Net price each\$14.25

THE IMPROVED GIANT TIRE BENDER.



Sizes. Net price each.

Extra Heavy Size Bends 6x1 inch.....\$23.00

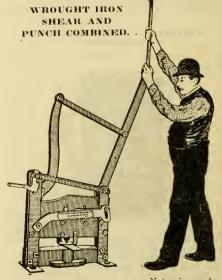
No. 1 Size Bends 4x1 inch................................ 20.50

WROUGHT IRON SHEAR.

Shipped from Factory.



No. 197, weight 255 pounds. Has 12 inch knives. Will cut 4 inch by 34 inch flat iron, and 114 inch round or square iron; also will cut Plow Steel from 6 to 10 inches wide......\$33.00



Net price each.

No. 193, weight 450 pounds. Will cut 4 inch by 34 inch flat iron, and 114 inch round or square iron. Will punch 1/2 inch holes through 1/2 inch iron.....\$42.00

ADAM'S DIAMOND VISES.



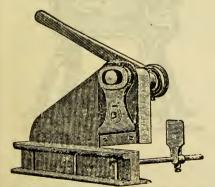
LITTLE GIANT IRON PLATE FOR TIRE SETTING.



Size. Net price each. 5 feet diameter, 30 inch hole......\$17.00

The above cut shows one of our flat Iron Tire Plates for Tire Setting. These plates are cast in one piece, and are supported by ribs. A strong plate, yet light for handling.

HANDY SPLITTING SHEARS.

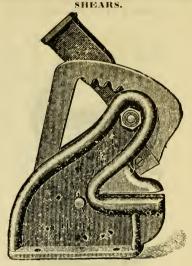


No. 1.

Net price each\$13.50

Will shear 1/8 inch Sheet Metal and less any length or width. Weight 65 pounds. It is designed for tinners and all workers of light metal,

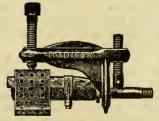
BADGER BAR AND ROUND IRON



No. A1.

BADGER-HAND PUNCH.

THE LITTLE GIANT AXLE SETTER AND STRAIGHTENER.



A labor and time saving machine that does its work complete. Axles bent can be accurately set without removing, making a perfect job. With the use of this machine it is not necessary to set axles on a new job until it is ready for the paint shop. All four axles can be straightened in less time than is usually required to remove one.

Sizes. Net price each. For axles up to and including 1¾ in....\$5.00

Shipped from Factory.



This is the Most Powerful Lever Punch and Shears Made.

No. 1-Will cut from 5/8 inch thick, 8 inches wide, and punch 5/8-hole in 1/2-inch iron. Weight, 500 pounds.

Net Cash price each.....\$47.50

No. 2-Will cut iron 1/2 inch thick and 6 inches wide, and will punch 1/2-inch hole in 1/2-inch iron. Weight 325 pounds.

Net Cash price each.....\$38.00

No. 3-Will cut iron 3/8 inch thick and 6 inches wide, and will punch 1/2-inch hole in 3/8inch ron. Weight, 250 pounds.

Net Cash price each\$28.50

600 lbs. on lever gives 25,000 lbs. pressure on punch. Always ready for work, and it does the business. Made in three sizes.

No. 1 cuts iron 5% inch thick up to 8 inch wide and 1 inch round; it will punch 5/8 hole in 1/2-inch iron. Weight, 500 lbs.

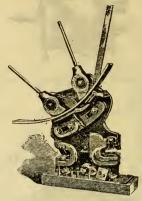
No. 2 cuts 6x1/2 and 7/8 round, punches 1/2inch hole in 1/2-inch iron. Weight, 350 lbs.

No. 3 cuts iron 6x36, punches 76-inch hole in 3/8-inch iron. Weight, 250 lbs.

Occupies a floor space when it is up 10x24 inches. It is simple in construction, there being only two pieces of castings in it. You can duplicate any part of it in your own blacksmith shop. We furnish with each machine five sets of punches and dies, 16, 38, 16, 1/2 and 5/8.

LITTLE GIANT PUNCH AND SHEAR. BLACK GIANT SHEAR, UPSET AND PUNCH.

Shipped from Factory.

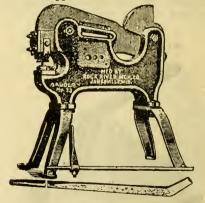


Net price each.....\$47.00

"The Proof of the Pudding Is the Eating." This old and trite saying is certainly applicable to our goods. Our New Improved Black Giant Shear, Upset and Punch combined, still continued to lead the band.

BADGER PUNCH AND SHEARS.

Shipped from Factory.



No. 33.

Net price each, \$29.00

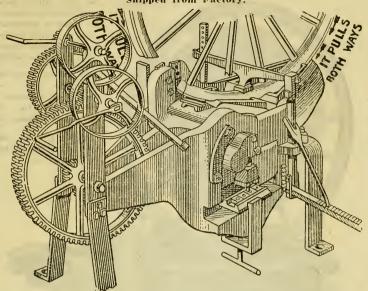
No. 33-Will shear 1/2 in. x 21/2 in. or 3/4 in. x 3 in. bars or 7/8 in. round iron. Will punch 3/8 hole in 3/8 in. plate, to center of 6 in. Weight, 310 lbs.

Net price each\$50.00

No. 66-Will shear 1/2 in. x 4 in. or 5/8 in. x 3 in. flat bars or 1 in. round. Will punch 1/2 in, hole in 1/2 plate to center of 6 in. Weight, 510 lbs.

THE HOUSE COLD TIRE SETTER.

Shipped from Factory.



Our No. 2 and No. 3 Machine.

Is the greatest money maker that the blacksmith has ever had a chance to get. Why? Because it will set a tire in five minutes, and at an average of 50 cents each, will earn six dollars per hour, and sixty dollars in a day; and if you buy it and advertise it, it will pay for itself in three or four days the first dry spell that comes. Now these are facts and you can't dispute them because they are proven by testimonials, and the 1400 machines now in use in every state in the Union and in seven foreign countries. So it is up to you. Now, why won't you buy? Is it because you haven't the enterprise to make a little effort to get out of the old rut? Or, is it because you are making all the money you need? It is a joke for a man to run a shop without one. Anybody can buy one, and make it pay for itself.

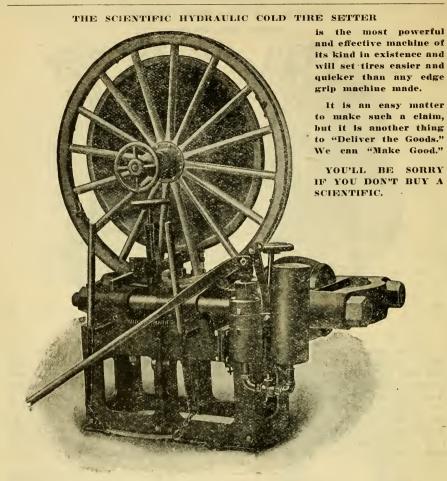
write us.	
Net price e	
No. 1 Machine sets tire up to $34x2$ inches	.00
No. 2 Machine with Hand Power sets tire up to 34x31/4 inches 250	.00
No. 2 Machine with Power Attachment sets tires up to \(\frac{4}{3} \times \) inches \(\ldots \) 265	.00
No. 3 Machine with both Hand and Power Attachment sets tires up to	
1x4½ inches	.00

WARRANTY.

We warrant each machine to be made of high grade cast steel, the No. 1 machine to set or reset all ordinary tires, cold, two inches wide by three-quarters of an inch thick, or all smaller sizes, on wheels from thirty to sixty inches in diameter. The No. 2 to set or reset all ordinary tires, cold, 3¼ inches by ¾ inch, or all smaller sizes on wheels 30 to 60 inches in diameter. The No. 3 machine to set or reset all ordinary tires, cold, 41/2 inches wide by 1 inch thick, and all smaller sizes (tires wider than 2½ inches must not be cupped or less than ½ inch thick), and to be capable of doing the work well if our instructions are carried out. All grip-keys that break on account of defects within one year from shipment will be replaced without charge, F. O. B., St. Louis, Mo.

EXPLANATION.—The word "ordinary," used in the above warranty, is intended to cover all tires that are reasonably worth setting at all, and not tires that

are rotten or so badly worn or cupped that they are of little or no service.



THE SCIENTIFIC WITH STEEL CONE DISHER.

Shipped from Factory.

FACTS that Cannot be Denied by Other Manufacturers of Edge Grip Tire Setters.

FIRST—The Scientific is the easiest operated edge grip tire setter in the world. SECOND—The Scientific will set tires in less time than any other.

THIRD—The Scientific has better tool steel grip jaws than any other.

FOURTH—The Scientific gripping jaws are better adjusted than any other.

FIFTH—The Scientific in intrinsic value is worth more money than any other.

Get a catalog that fully describes it.

By means of a new attachment the Scientific can be made to SET PERFECTLY wide thin tires, tires worn oval or to a thin edge, channel tires or thin buggy tires on nicely painted wheels, without marring the tires or felloes in the least. No other edge grip machine has ever done.

With this machine, the tire is drawn tightly around the wheel, and shortened from 1-16 to ½ inch at each gripping, by a few strokes of the hydraulic pump

handle. TRY IT.

If you appreciate a machine that works easily, buy a Scientific. If you like hard work, then buy a cheap machine or set tires the old way.

See description and prices next page.

Cook Time

SIZE OF SCIENTIFIC TIRE SETTERS.

No.	2	Machine	will	set	tires	2 x	1/2	or	11/2:	x 5/8	and	smaller.	Weight	
No.	21/2	44	66	"										
No.		44	6.6	66	66	3 1/2 x	5/8	or	3	x 3/4	- 66	66		
No.	4	4.6	46	4.6	66	4 x	3/1	or	3	x1	4.6	66		2200
No.		46	6.6	4.6	6.6	5 x	1	or	41/2	x11/8	6.6	4.6		4000
No.		66	6.6	4.6	4.4	6 x	11/4	or	5	x1 1/2	"	66		6000

The sizes given above are for iron tires and if steel tires are to be set, a less size should be figured on, ranging from 1-5 to 1-3 less according to the hardness of the steel in the tire.

FLOOR SPACE required for hand machines is from 4 ftx3 ft to 6 ftx5 ft and with power attachment a slight additional space.

CAPACITY.

So much depends upon the quickness of the operator in setting tires with the Scientific that we dare not give the greatest capacity with the assurance that every one will equal it so we will state that with a No. 2½ machine tires can be set in from one to five minutes according to size of tire. There is not a blacksmith worthy the name but can set a wagon tire 1½x¾ every five minutes by hand, which is at the rate of twelve per hour or one hundred and twenty for ten hours.

With power attachment the work can be greatly increased.

Large tires, of course, require proportionately longer time than small ones.

The same size of tire can be set by each size of machine, capable of setting it, in practically the same time.

WARRANTY.

Each machine is warranted to be well made, of good material; to set or reset tires cold and of the size stated above, to be capable of doing the work as well as is done by any other edge grip tire setter, to set tires *quicker* and *easier* than can be done with any other edge grip tire setter, and to be and to do as is represented by us in letters or printed matter, if our directions are followed.

Should any part of the machine prove defective or not strong enough to do a work required, it will be furnished by us free of charge.

This Warranty to be in force one year from date of installation of machine.

To test the merits of the machine we are willing that it should be used in competition with any other edge grip tire setter manufactured.

NOTE SPECIALLY.

There is one point we want to impress on the reader for his benefit as well as ours and that is he should not buy an edge grip machine without first seeing the Scientific. Words fail to convey to the mind of the casual reader the great difference in ease of operation, speed and general value of the Scientific as compared with other machines, hence we are anxious that prospective purchaser of tire setters should see this one in operation.

PRICE LIST OF SCIENTIFIC TIRE SETTERS.

																			1511		
															W	eigl	ıt	Pr	ice	Pr	ice
No 2	To set	tires	26	stated	in	catalog				 	 	 	 		1	25	0	\$1	40	\$	150
No. 21/				"	111	"		 	 	 	 	 	 		1	30	0	1	60		170
No. 3	- "	66		6.6														2	00	9	215
No. 4	66			"		4.6													60		275
No. 5	66			66				 	 	 	 	 	 		4	00	0	_	00		425
No. 6				66														-	50		600
Power	Attachn	nent,	No.	2. and	25	/2		 	 	 	 	 	 			٠.					30
- 44	66		No.	3 and	4			 	 	 	 	 ٠.	 	٠.			٠.				40
"	44		No.	·5 and	6		 	 	 	 	 	 	 			٠.					50

TERMS.

Time Terms on all machines—One-fourth cash, balance in six equal notes one month apart.

Machines are delivered on cars or boat at Keokuk, Ia.

Machines will always be billed at time price and if paid for within ten days after receipt a discount will be allowed to make cash price.

A special catalog will be mailed upon application.

SILVER'S POWER BAND SAW.

With Wright's Patent Non-Friction Roller Saw-Guide.

Shipped from Factory.

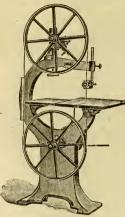


Fig. 820.

DESCRIPTION.

Band Wheels—They are 26 inches diameter, and both are turned perfectly true and balanced. The endless rubber bands are securely cemented to the rims of the wheels in a way that will hold them to place. The upper wheel can be adjusted in any direction while machine is running, to keep saw in proper alignment. It also has up and down adjustment of several inches to accommodate saws of different lengths. The universal adjustment of this wheel will enable the user to lead the blade to any point on the face of the wheel.

Saw Blades—One blade, 3/8-inch wide by 13 feet 9 inches long, set and sharpened ready for use, is sent with this machine. Customers may have choice of any width up to 1 inch. Brazing clamp and tongs are included with

Saw Guides—The one above the table is Wright's Patent Non-Friction Roller Guide, and serves as a good back and side support for the saw. As the back bearing revolves, the saws will not crystallize nor change in temper, and this point very materially lessens the breakage of saws. The new guide saves sixty per cent of wear and breakage of saws.

Tensions—There is a spring tension on this saw to counteract the weight of the saw guide, which aids in adjusting it. It is inclosed inside of the frame, out of the way of operator.

Main Shaft—It is bored out and plugged so

Main Shaft—It is bored out and plugged so as to form an oil chamber for lubricating the loose pulley. Small holes are drilled into the shaft at point where pulley runs so as to lubricate the pulley. The oil is fed in through small hole in end of shaft.

Table—The table is made of iron and is planed level on top and beautifully finished on the edge. It can be tilted to any angle up to 45°, and a stop is provided for quickly

returning it to position. It is held rigidly at every point by an eccentric lever, size, 20x24 inches.

Dimensions—Size of wheels, 26 inches; diameter, 1½-inch face; distance between saw and frame, 25 inches; height under saw guide, when raised, 8½ inches; table, iron, 20x24 inches; pulleys, 10x3 inches; width of belt, 3 inches; speed, 350 to 450 revolutions; length of saw blade, 13 feet 9 inches; floor space, 30x40 inches.

Shipping Weight—Belt power, 600 pounds; combination, 660 pounds.

SILVER'S COMBINED FOOT AND POWER SAW.

20-Inch Iron Band Wheels.
Shipped from Factory.

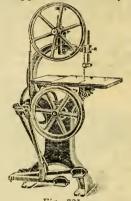


Fig. 721.

Sizes. Net price each. 20-inch machine, with gearing and foot

treadles, for one or two men, no pulleys \$42.00 Extra saw blades, 10 feet 1 inch x 1/4 or 3/6 inch, each 1.10

DESCRIPTION.

This machine is arranged for foot power, as illustrated. The lower band wheel is made heavy so that the running parts attain momentum when sawing. The saw is geared up from the treadles so as to be able to get the proper speed for sawing. In addition to the foot treadles, which show in the picture, there is a handle on the main drive gear so that a second person may assist with heavy work.

In dimensions and other respects this machine is like the 20-inch saw on the preceding page. This saw may also be fitted with pulleys for belt power. In driving by belt, disconnect the foot power attachments by removing one of the gear wheels.

Each saw is supplied with two saw blades and outfit for brazing broken saws.

Shipping weight, foot power, 390 pounds; combination, 415 pounds.

SIZES AND PRICES OF SAW BLADES.

Saw Length ¼ ¾ ½ ½ ¾ ¾ 1 in. 20 in. 10 ft. 1 in. \$1.10 1.10 1.20 1.30 1.40 1.60 26 in. 13 ft. 9 in. 1.35 1.45 1.55 1.65 1.80 2.00 32 in. 16 ft. 4 in. 1.55 1.65 1.80 1.95 2.10 2.45 36 in. 18 ft. 6 in. 1.70 1.85 2.00 2.15 2.30 2.75

SILVER'S POWER BAND SAW.

With Wright's Patent Non-Friction Roller Saw-Guide.

Shipped from Factory.

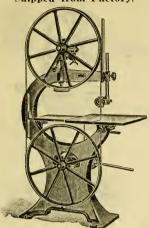


Fig. 822.

32-inch Iron Band Wheels.

Net price each. 32-inch machine, with tight and loose\$73.50 inch, each ...

DESCRIPTION.

Band Wheels—They are 32 inches diameter, and both are turned perfectly true and balanced. The endless rubber bands are securely cemented to the rims of the wheels in a way that will hold them to place. The upper wheel can be adjusted in any direction while ma-chine is running, to keep the saw in proper alignment. It also has up and down adjustment of several inches to accommodate saws of different lengths.

Saw Blades—One blade, ½-inch wide by 16 feet 4 inches long, is sent with each saw. Customers may have choice of any width up to 1 inch. Brazing clamp and tongs are in-

cluded with saw.

Tension—There is a spring tension on this saw to counteract the weight of the saw guide, which aids in adjusting it. It is inclosed inside of the frame, out of the way of operator.

Main Shaft—It is bored out and plugged so

as to form an oil chamber for lubricating the loose pulley. Small holes are drilled into the shaft at point where pulley runs so as to

lubricate the pulley.

Table—The table is made of iron and is planed level on top and beautifully finished on the edge. It can be tilted to any angle up to 45 degrees, and a stop is provided for quickly returning it to position. It is held rigidly at every point by an eccentric lever, size 24x28

Dimensions-Size of wheels, 32 inches diameter, 134-inch face; distance between saw and frame, 31 inches; height under saw guide, when raised, 11 inches; table, iron, 24x28 inches; pulleys, 12x3½ inches; width of belt, 31/2 inches; speed, 350 to 450 revolutions; length of saw blade, 16 feet 4 inches; floor space, 35x48 inches.

Shipping Weight—950 pounds.

SILVER'S POWER BAND SAW.

With Wright's Patent Non-Friction Roller Saw-Guide.

Shipped from Factory.

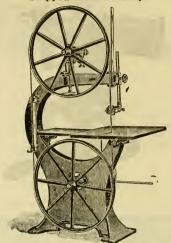


Fig. 824.

36-Inch Iron Band Wheels. Size. Net price each. 36-inch machine, with tight and loose

pulleys Extra saw blades, 18 feet 6 inches x ½ 2.00 inch, each

Extra saw blades, 18 feet 6 inches x 3/4 2.30 inch, each

DESCRIPTION.

Band Wheels-They are 36 inches diameter, and both are turned perfectly true and balanced. The endless rubber bands are securely cemented to the rims of the wheels in a way that will hold them to place. The upper wheel can be adjusted in any direction while machine is running, to keep saw in proper alignment. It also has up and down adjust-ment of several inches to accommodate saws of different lengths.

Saw Blades-One blade, 34-inch wide by 18 feet 6 inches long, is sent with each saw. Customers may have choice of any width up to 1 inch. Brazing clamp and tongs are included with saw.

Saw Guide—The one above the table is Wright's Patent Non-Friction Roller Guide, and serves as a good back and side support for the saw. As the back bearing revolves, the saw will not crystallize nor change in temper, and this point very materially lessens

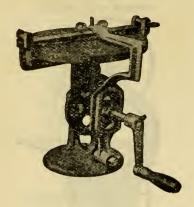
the breakage of saws.

Tension—There is a spring tension on this saw to counteract the weight of the saw guide,

saw to counteract the weight of the saw guide, which aids in adjusting it. It is inclosed inside of the frame, out of the way of operator. Dimensions—Size of wheels, 36 inches diameter, 2-inch face; distance between saw and frame, 35 inches; height under saw guide, when raised, 14 inches; table, iron, 28x32 inches; pulleys, 12x4 inches; width of belt, 4 inches; speed, 350 to 450 revolutions; length of saw blade, 18 feet 6 inches; floor space, 39x57 inches. 39x57 inches.

Shipping Weight-1,175 pounds.

AUTOMATIC CLIPPER KNIFE GRINDER.



Net price each.

Fitted for horse clipping knives......\$6.00
Fitted for sheep shearing knives...... 6.00
Fitted for both horse and sheep knives... 6.50

Sharpens horse clipper or sheep shearing knives in a few seconds good as new. It is automatic. Weight boxed, 36 lbs.

CLIP THE HORSE.

One of the greatest improvements ever introduced into stable management, according to the opinions of leading veterinarians, is the custom of clipping horses in the spring, which has now become so common. A clipped horse will not only do a greater amount of work on the same amount of food that a horse with his natural winter coat will do, but he will also be fresh and full of vigor, while the horse with the heavy winter coat will be dull, out of condition and seldom or never dry or clean. Clipping removes the tendency to sweat, and there is no comparison as between a long, wet coat and a short, dry one. When the winter coat is warmed up and the horse is being worked regularly it is next to impossible to thoroughly dry the coat, and this causes the animal to lose flesh, in addition to making him a prey to a multitude of ills. Big companies, which requires hundreds of horses in carrying on their business, have experimented and have found that where their horses were clipped coughs and pneumonia have been practically eliminated. Clip your horses early in the spring if you want to keep them healthy and in good condition .- The Horseman.

See Horse Clippers, Pages 95 and 96, this catalogue.

SILVER'S NEW BAND SAW.

20-Inch Iron Band Wheels

Shipped from Factory.

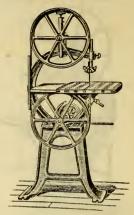


Fig. 720.

DESCRIPTION.

Band Wheels—They are 20 inches diameter, and both are turned perfectly true and balanced. The endless rubber bands are securely cemented to the rims of the wheels in a way that will hold them to place. The upper wheel can be adjusted in any direction while machine is running, to keep saw in proper alignment. It also has up and down adjustment of several inches to accommodate saws of different lengths. The universal adjustment of this wheel will enable the user to lead the blade to any point on the face of the wheel.

the wheel,

Saw Blades—Two saws are furnished with
each 20-inch machine, ¼ and ¾, No. 22
gauge, 10 feet 1 inch long, set and sharpened
ready for use. Customers may have choice
of any width biade up to 1 inch. Hardwood
guides, brazing clamp and tongs are also included with each saw.

Pulleys—They are tight and loose, 7 inches diameter for 3-inch belt. A belt shifter and lever is provided as shown; no countershaft required. This machine is also made to drive by foot power. (See the following illustration.)

Table—Its size is 20x24 inches and is made of veneer glued together and re-inforced by an iron rib.

Dimensions—Size of wheels, 20 inches; distance between saw and frame, 19 inches; height under saw guide, when up, 7 inches; table, 20x24 inches; pulleys, 7x3 inches; size belt, 3 inches; length of blade, 10 feet 1 inch; speed, 350 to 450 revolutions per minute; floor space, 24x30 inches.

Speed-350 to 450 revolutions per minute.

Shipping Weight-300 pounds.

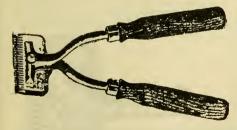
TOILET AND FETLOCK CLIPPERS.



Cut shows No. 10.

	Net price each.
No. 10. Fetlock (like cut) changeable parts	
No. 20. Fetlock, 3 coil music interchangeable parts	
No. 40. Fetlock, 12 coil music with cap screw to regulate spring, interchangeable parts	tension of
No. 2. Toilet, 3 coil music v interchangeable parts	
No. 3. Toilet, same as No. 2 ble tension	
No. 5-1. Toilet, best of ma made, best cutting	
No. 5-0. Toilet, same as No. has fine teeth, cutting hair	

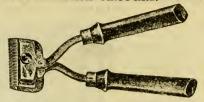
HORSE CLIPPERS.



No.	20	Hotchkiss	price	
No.	40	BB Hotchkiss	 	. 1.50
No.	50	Harvard	 	. 1.00

One of the most popular and one of the most salable Horse Clippers in the market. Is strongly constructed, perfectly fitted and adjusted.

HORSE CLIPPERS.



No. 400.

Net price each\$2.00

Our Anti-Friction Ball Bearing Horse Clip-per, recognized by the trade to be the best finished, and best working Clipper in the market, The mechanism and working qualities are perfect in every detail. Is full polished with natural finish Ebony handles.

1902 CHICAGO CLIPPER.

STEWART PATENT.



Net price each\$10.75

Has positive power; rigid base; fine strong crank handle; 6½ foot flexible steel shaft. All gears are cut from solid metal and wearing parts all tool steel hardened, can be turned with either right or left hand. Complete with one set of Stewart one-nut tension knives in case. Weight, boxed, 56 lbs.

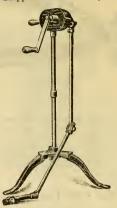
This machine is surprisingly strong and durable. The World's record for fast clipping was made with it at the St. Louis Exposition—time 13½ minutes. A boy can turn it all day without tiring. It satisfies completely the needs of the large stable.

CHICAGO VETERINARY POWER FLOAT.

Can be instantly attached to any of our clipping machines. Does better work than the hand float, keeps the horse's teeth in good condition.

ENCLOSED GEAR SHEEP SHEARING MACHINE.

Shipped from factory.



Net price, complete with 4 knives.......\$9.75 Extra Combs, 50c; Extra Cutter, 50c; Postage, 5c each.

All moving parts are enclosed in a dust proof box, where they run in oil. This practically does away with friction and wear. It turns easily and shears fast. The gears are cut from solid steel bar, and are hardened file hard by special hardening process. They could not be harder or tougher.

Weight, boxed, 40 lbs.

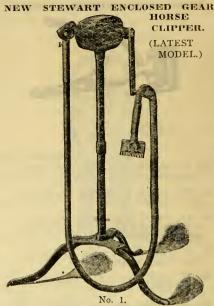
STEWART'S 1904 SHEEP SHEARING MACHINE.

Shipped from factory.



Net price, complete with 4 combs and 4 cutters \$12.75 Extra Combs, 50c; Extra Cutter, 50c; Postage, 5c each.

Has revolutionized the sheep-shearing industry. It is scientifically simple, strong and durable, and adapted for flocks of from 5 sheep to 2,000. This machine saves wool, (about one pound to the head), saves time, saves labor, and saves the sheep. Weight, 52 lbs. Boxed, 70 lbs.



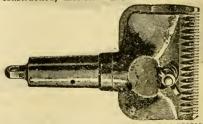
Net price each from stock.....\$7.50

Has new style rigid base; tubular upright. All gears are cut from solid metal and are inclosed in a dust-proof metal box. They run constantly in a bath of oil, which reduces friction to a minimum. All wearing parts are hardened tool steel. New type light, easy running flexible shaft 6½ feet long. Complete with one set of Stewart one-nut tension knives. Weight, each, boxed, 36 lbs.

This new machine meets the demand for a

This new machine meets the demand for a very high grade clipper at a price any horse owner can afford. Every moving part is inclosed and safe from dust and dirt of all kinds. It runs easy and cuts with the greatest speed. Is very compact; can be carried around conveniently. By all odds a superior machine in

construction, materials and action.

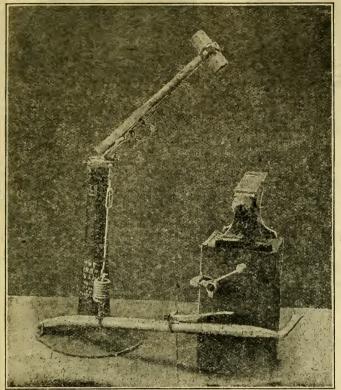


ALL OF THESE CLIPPING MACHINES ARE FITTED WITH THE ONE-NUT STEWART TENSION KNIFE.

	Net price each.
Knife and handle complete	
Extra knives, per set	2.50
Extra bottom plates	1.50
Extra top plates	1.00
Shaft and chain, per foot	
Shaft less chain, per foot Chain, per foot	
Handles only	

THE IRON-MAN.

Shipped from factory.



This is a Machine no blacksmith can afford to do without. It is always ready for business without pay or prompting. It is acknowledged by all smiths that have had a chance to test its merits to be the greatest time and labor-saving tool ever placed on shop floor.

The hammer is so nicely adjusted between coil springs and is so perfectly under the control of the smith that all kinds of welding can be done perfectly; enabling the smith to have both hands free to handle his work. After the weld is made, the flatter or swedge can be used the same as with a helper in making a nicely-finished iob.

This machine is operated by foot power, and is so arranged that it can be adjusted to work at any

point of the anvil from the horn to the heel; can also be as quickly adjusted to work rapid for welding light work, and strikes with an exactness that no helper can attain to from the simple fact that it strikes a mechanically true blow every time. It is under the perfect control of the operator at all times.

Net price each......\$25.00

THE REYNOLD'S AXLE GAUGE.



The simplest and best Axle Gauge on the market.

Adjusts itself to the spindle and registers the exact amount of set or gather on the indicator plate in inch measure. Can be adjusted to any length axle. Accurate, durable and easily handled. Can be used without removing axle from vehicle.

Price\$3.50 each.

THE EASY SCREW PLATES.



Dimensions of the Easy.

No. 5 B, Plate Complete in Box. Has two stocks, one 15½ inches long for the first four sizes, one 23 inches long for the larger sizes. Cutting ½20, 15, 18, 3, 18, 17, 16, 14, ½12, 5, 18, 13, 18, 18, 18, 18, 18

No. 9 B, Plate Complete in Box. Has two stocks, one $15\frac{1}{2}$ inches long for the first four sizes, one 26 inches long for the larger sizes. Cutting $\frac{1}{4}$ 20, $\frac{7}{16}$ 18, $\frac{3}{3}$ 19, $\frac{7}{16}$ 14, $\frac{1}{2}$ 12, $\frac{9}{16}$ 12, $\frac{3}{3}$ 11, $\frac{3}{4}$ 10, $\frac{7}{8}$ 9, $\frac{18}{18}$. 15.50

Note.—Every set supplied with our Patented Adjustable Electric Tap Wrench.

THE EASY FULL MOUNTED SCREW PLATES.



Sizes.

Net price each.

No. 55, Plate Complete in Box, with Adjustable Tap Wrench. Cutting $\frac{1}{4}^{20}$, $\frac{1}{16}^{18}$, $\frac{3}{8}^{16}$, $\frac{7}{16}^{14}$, $\frac{1}{2}^{12}$, $\frac{5}{8}^{11}$, $\frac{3}{4}^{10}$\$ 9.00

No. $55\frac{7}{2}$, Plate Complete in Box, with Adjustable Tap Wrench. Cutting $\frac{1}{4}^{20}$, $\frac{5}{16}^{18}$, $\frac{3}{8}^{16}$, $\frac{7}{16}^{14}$, $\frac{1}{2}^{21}$, $\frac{9}{16}^{12}$, $\frac{5}{8}^{11}$, $\frac{3}{4}^{10}$... 11.50

THE ELECTRIC SCREW PLATES.



Sizes.

Net price each.

No. 7, Plate Complete in Box. Has two stocks, one 18 inches long for the first four sizes, one 29 inches long for the larger sizes. Cutting $\frac{1}{4}^{20}$, $\frac{6}{18}$, $\frac{18}{3}$, $\frac{18}{16}$, $\frac{7}{16}$, $\frac{1}{14}$, $\frac{1}{14}$, $\frac{1}{2}$, $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, $\frac{1}{4}$, $\frac{1}{4}$, $\frac{1}{8}$, $\frac{1}{8}$ 16.00

No. 9, Plate Complete in Box. Has two stocks, one 18 inches long for the first four sizes, one 29 inches long for the larger sizes. Cutting $\frac{1}{4}^{20}$, $\frac{1}{16}^{18}$, $\frac{3}{8}^{18}$, $\frac{7}{16}^{14}$, $\frac{1}{4}^{12}$, $\frac{9}{16}^{12}$, $\frac{5}{6}^{11}$, $\frac{3}{4}^{10}$, $\frac{7}{8}^{9}$, $\frac{18}{18}$ 18.50

Note.—Every Set supplied with our Patented Adjustable Tap Wrench.

THE ELECTRIC FULL MOUNTED SCREW PLATES.



Sizes.

Net price each.

No. 105, Plates Complete in Box, with Adjustable Tap Wrench. Cutting 1/420, 1618, 3/818, 7/614, 1/212, 5/611, 3/410......\$11.25

No. 105½, Plate Complete in Box, with Adjustable Tap Wrench. Cutting ½20, 1618, 3616, 7614, 1212, 1612, 5611, 3410.... 13.50

No. 107, Plate Complete in Box, with Adjustable Tap Wrench. Cutting ½20, 5,618, 3&16, 7,614, 1½12, 5%11, 3½10, 7%8, 18.. 18.75

No. 107½, Plate Complete in Box, with Adjustable Tap Wrench. Cutting ½20, ½6,18, 3½16, 7,614, ½12, 16,12, 5½11, ¾410, ½18, 18

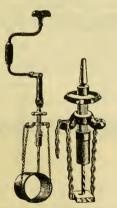
LITTLE GIANT SCREW PLATES.



Each Assortment in a Neat Wood Casc.

Laci Masorinient in a freat tree
Sizes. Net price each.
No. 1 has stock 141/2 in. long, cuts 1/4,
15,6 3/8, 7/6, 1/2\$ 8.00
1(6) 70, 16, 72
No. 5 has stock 23 in, long, cuts 1/4, 1/6,
$\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$
No. 51/2 has stock 23 in. long, cuts 1/4,
$\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$, $\frac{9}{16}$, $\frac{5}{8}$, $\frac{3}{4}$
No. 6 has stock 26 in. long, cuts 3/8, 16,
1/2. 5/8, 3/4, 7/8, 1
No. 7 has stock 26 in. long, cuts 1/4, 16,
$\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, $\frac{7}{8}$, 1
98, 16, 72, 78, 74, 78, 1
No. 9 has stock 141/2 in. long for first
four sizes, and 29 in, stock for the
larger sizes, cuts 1/4, 16, 3/8, 16, 1/2, 5/8,
larger 312c3, cuts /4, 16, 78, 16, 72, 70,
3/4. 7/8. 1

LUTHER'S "IDEAL" DRILLING ATTACHMENT.



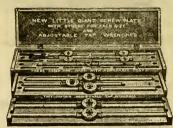
No Blacksmith, Carriagemaker, Boilermaker, Mechanic, Plumber, Repairer, Windmill and Pumpman or Worker in Iron and Steel can afford to be without this drill. Blacksmiths and Carriagemakers can do nearly all jobs of drilling without removing the work. Superior to the breast drill as no pressure is required by the operator, the chain does that. Used on any bit-stock and puts holes in iron and brass easier than the common bit and brace into hard wood.

Luther's "Ideal" Force Drill works on ball bearings. Remember the chain does the press-

ing on, you don't.

Style B. Takes Standard Square Shank,
Bit Stock Drill. This is the style most
commonly used90

LITTLE GIANT FULL STOCKED SCREW PLATES.



NET PRICES OF PARTS FOR FULL STOCKED PATES.

STOCKED PATES.												
Size.	Die.	Guide.	Stock.	Tap.								
3 16	\$0.85	\$0.17	\$0.43	\$0.18								
1/4	.85	.17	.43	.22								
1/4 15 3/8	.85	.17	.43	.25								
3/8	1.06	.17	.43	.28								
7 16	1.06	.17	.65	.30								
1/2	1.27	.17	.65	.35								
1/2 9 16 5/8 11	1.27	.17	.65	.40								
5/8	1.49	.17	.65	.45								
11	1.49	.17	.65	.53								
3/4	1.70	.17	.65	.60								
13	1.70	.17	.85	.70								
7/8	2.34	.17	.85	.80								
15	2.34	.17	.85	.90								
1	2.34	.17	.85	1.00								

LITTLE GIANT PIPE SCREW PLATES.



Sizes. Net price each. No. 1 Plate, Cutting ¼, ¾, ½, ¾, 1 in.. \$5.40 No. 2 Plate, Cutting 1¼, 1½, 2 in..... 9.00

Note.—The guides are interchangeable throughout the set for convenience in cutting nipples. Sure to cut the thread straight. The dies can be resharpened. Dies are adjustable to overcome variation in fittings on pipe. Dies and guides can be changed quickly. It is light, yet strong and durable. Dies are held by bevel. No screws to break or get out of order.

KNURLED CUP POINT NAIL SETS.



Assorted Points, net price each.....8c

KNURLED CENTER PUNCHES.



3/4 inch diam, at knurling, net price each ... 10c

LIGHTNING BURRING REAMER.



For Pipe, also for Countersinking. Of Fine Steel Carefully Ground to Cut Iron, Brass, Wood, etc.75c Net price each

LITTLE GIANT TAPS, DIES AND

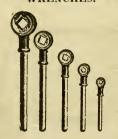
COLLETS.



For Bit Brace Use.

	Net	price	s com	plete.
Sizes				
No. of threads	24	20	18 1	6 14
Tap Die and Collet				
complete\$1.50				
Taps only25				
Dies only85	.85	.85	.85	.98

LITTLE GIANT RATCHET NUT WRENCHES.



								Each.
No.	1	18	and	1/8	inch.	7	inch.	\$0.80
No.	2	7.6	and	3/8	inch.	8	inch.	1.00
No.	3	7.	and	1/2	inch.	10	inch.	1.40
No.	4	5/8	and	3/4	inch.	13	inch.	2.20
No.	5	7/8	and	1	inch.	16	inch.	2.85

For the use of blacksmiths and carriage-makers. For the removal of nuts the above tool will be found a most convenient one. It is complete in itself. Is strong and thoroughly made. When ordering, give number of the

LITTLE GIANT PLATE DIES.









Explanation of the Little Giant Die.

The Collet or holder is made of two pieces called a cap and a guide. The cap has a bevel slot into which the bevel die is fitted. The guide is screwed into the cap, which throws the die into the bevel of the collet and into line. To adjust simply turn the screws at the ends of dies in or out, as the adjustment desired requires.

PRICES OF TAPS, DIES AND COLLETS FOR NEW LITTLE GIANT SCREW PLATES Nos. 1 to 9.

Collets, all sizes, \$0.40.

	,		
Diam.	No. of Threads	Net price	Net price
In.	to inch.	of Tap.	of Die.
	24	\$0.18	\$0.85
1/4	18, 20	.22	.85
5_	16, 18	.25	.85
36 1/4 156 3/8 176 1/2 166 5/8	14, 16	.28	.98
78 J_	14	.30	1.10
16	12, 13	.35	1.27
72	11, 12	.40	1.27
16		.45	1.40
7/8	10, 11, 12		
18	11	.53	1.40
3/4	10	.60	1.60
13	10	.70	1.70
7/6	9	.80	2.34
15	9	.90	2.34
1	8	1.00	2.34

STEEL STAMPS, LETTERS AND FIGURES.

Shipped from Factory.



Net prices per letter or figure. Sizes. 1/8 inch25 inch inch35 Stamps with eyes for handle add 35c to the

Note.—Stamps with three letters or less 5c

per letter additional. Carefully made of best nglish steel and properly tempered.

CLARK'S DOUBLE CUT COUNTER-SINKS.



METAL COUNTERSINKS.



ROSE COUNTERSINKS.



For Metal or Wood.
Net price each\$0.10

SNAIL COUNTERSINKS.



For Metal or Wood.

BIT BRACE REAMERS.



For Bit Brace Use.

Sizes, in... ½ 16 36 16 1/2 16 5/6 18 34

Net price cach ...\$0.16 .20 .24 .28 .32 .40 .48 .56 .64

For Use in Drilling Machines.

LITTLE GIANT COUNTERSINKS.



For use in Bit Brace.



BLACKSMITHS' STOCK AND DIES.



		No. of N	lo. No	. Net
No.	Size.	Threads. Ta	aps Die	s price
15	11/4 to 1/2	8, 10, 12	5 3	\$5.60
23	1 to 3/8	9, 10, 14	3 2	
34	3/4 to 18	10, 12, 16	3 3	2.45
34A	3/4 to 15	10, 12, 14	3 3	2.45
34B	3/4 to 18	12, 14, 16	3 3	2.45
35	3/4 to 3/8	10, 14	2 2	2.20
37	5/8 to 3	14, 18, 22	6 3	2.35
37A	5/8 to 18	12,14, 16	6 3	2.35
37B	5/8 to 18	14, 16, 18	6 3	2.35
41	1/2 to 1/8	16, 20, 26	6 3	1.75
41A	½ to 1/8	14, 16, 18	6 3	1.75
41B	½ to 1/8	16, 18, 20	6 3	1.75
53	5 to 16	16, 20, 24, 32	4 4	1.50
55	15 to 18	18, 24, 32	4 3	1.35

BLACKSMITHS' TAPER TAPS.

Million management

Siz	es.	•		Net price each.	
1/4	inch		6, 18, 20,	22, 24	15c
5 16	inch		14, 16,	18, 20	15c
3/8	inch		12, 14,	16, 18	18c
78	inch		12, 14,	16, 18	20c
1/2	inch		10, 12,	14, 16	20c
9	inch		10, 12,	14, 16	25c
5/8	inch		10,	11, 12	25c
3/1	inch		8,	10, 12	33c
7/8			8,	9,10	45c
			8,	9, 10	63c

THE CHAMPION PATENT ELECTRIC ADJUSTABLE TAP WRENCH.



LITTLE GIANT ADJUSTABLE TAP WRENCH.



Sizes. Net price each.
Size No. 6, Length 15 inches for Taps 1/4
to 3/4 inch\$2.00

GERMAN GIMLET BITS.



Best Quality.

	Net price		Net price per doz.
Sizes.	per doz.	Sizes.	per doz.
No. 2.	2-32\$0.60	No. 1,	7-32\$0.00
No. 3,	3-3260	No. 8,	8-3265
		No. 10	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
	5-32		

SYRACUSE PATENT WOOD BRACE DRILLS.



The Number indicates the sizes in 32ds.

Mo	Net price each. \$0.08	No. 10	\$0.18
No. No.	5	No. 12 No. 13 No. 14	22
No. No.	7	No. 15 No. 16	

STRAIGHT SHANK DRILLS.



For Use in Chucks.

		Net			Net
Diam.	Lgth.	price	Diam.	Lgth.	price
inch.	inch.	each	inch.	inch.	each
	21/2	\$0.04	5	4 1/2	\$0.15
3	23/4	.04	$\frac{11}{32}$	4 3/4	.17
1/6	3	.05	3/8	5	.19
5.	31/4	.06	13	51/4	.21
32	3 1/2	.08	7 16 15 32	5 1/2	.24
J_	33/4	.09	15	5 3/4	.26
1/	4	.11	1/2	6	.28
16 3 32 18 5 32 3 16 7 32 14 9 32	41/4	.13	1		

BIT STOCK DRILLS FOR METAL OR WOOD.



Tempered to Drill all Kinds of Metal as well as Wood. Will Bore without Splitting It.

		Net			Net
Diam.	Lgth.	price	Diam.	Lgth.	price
inch.	inch.	each	inch.	inch.	each
	3 16	\$0.05	15	6	\$0.18
3,0	23/4	.06	11	4 3/4	.21
1/6	41/8	.07	3/8	6	.24
5.	4 16	.09	13	61/4	.25
32	5	.11	7.	6 1/2	.29
7_	51/4	.12	15	63/4	.30
1/	5 1/2	.14	1/2	7	.33
16 32 18 52 17 27 1/4 912	53/4	.16	1		

DRILLS FOR BLACKSMITHS' DRILL PRESSES.



With Shank 21/4 inches long and 1/2 inch in Diameter.

		Net			Net
Diam.	Lgth.	price	Diam.	Lgth.	price
inch.	inch.	each.	inch.	inch.	each.
1/0	4 7/8	\$0.16	9 16 19 32	6	\$0.33
5	4 7/8	.17	19	6	.34
32	55/8	.18	5/8	6	.38
3.	5 5/8	.20		6	.40
1/4	6	.22	Į įį	6	.41
1/8 5 5 32 3 16 7 32 1/4 9 32 5 6	6	.23	103-40 013 (4 500 010 142 203-4-203 3 2 203-4-203	6 6 6 6 6 6 6 6	\$0.33 .34 .38 .40 .41 .43 .45 .47 .49 .50 .52
5 <u>.</u>	6	.25	3/4	6	.45
11	6	.26	25	6	.47
3/2	6 6 6	.27	255256 722 1257 722 7/8	6	.49
13	6	.28	27	6	.50
32	6	.29	7/8	6	.52
16 15		.30	29	6	.54
32	6	.31	7/8 992112	6	.61
17	6 6	\$0.16 .17 .18 .20 .22 .23 .25 .26 .27 .28 .29 .30 .31	1	6	.65
32		10.0			

MACHINISTS' HAND TAPS.



Lightning Taper Tap



Lightning Prug Tap



Lightning Bottoming

			Tap
Dia	No three ameter. to inc		Net price Each.
1/4	inch	24	\$0.22
$1\frac{5}{6}$	inch 16,	18	.25
3/8	inch14, 16,	18	.28
$\frac{7}{16}$	inch12, 14,	16	.30
$\frac{I}{2}$	inch12, 13,	14	.35
16	inch10, 11,	12	.40
5/8	inch	12	.45
, ,	inch10, 11,		.60
7/8	inch 9, 10,	12	.80
1	inch 8,	9	1.00

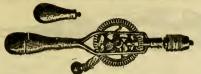
PIPE TAPS AND REAMERS.



Reamer.	Tap.
Net price	

	Net price		Net price
Sizes.	Éach.	Sizes.	Each.
1/2 inch	\$0.23	3/4 inch	\$0.50
1/4 inch		1 inch	
3/8 inch		11/4 inch	
½ inch		1½ incli	

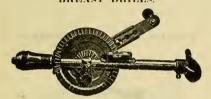
MILLER'S FALLS HAND DRILLS.



These Drills are made with three Jaws, resting in solid sockets. The chucks are nickeled and handles cocobola. They hold drills from

Sizes. Net price each. No. 1, including 8 fluted points in hollow handle

BREAST DRILLS.

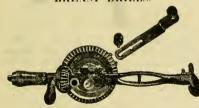


No. 10 Ball Bearing.

Net price each. Sizes.

Co-Alligator jaws, will hold both round and square shanks, and a patent level attachment to enable the operator to see when the tool is held thus.

BREAST DRILLS.



No. 12.

Net price each. No. 12\$2.45

BREAST DRILLS.



No. 13 Ball Bearing.

Sizes. Net price each.

a 6-inch drive wheel, giving speed 4½ to 1. The gears are cut, the handle cocobola and the stock and chuck nickel plated. Note the level attachment to show when the tool is being held thus, also the extension crank.

BRACE NUT WRENCHES



No. 2355.

В 176 inch Bolt. Takes Nut for 1/4 26 3/4 13 inch Net price each.....2c 3c 3c 4c

LITTLE GIANT DRILL HOLDERS.



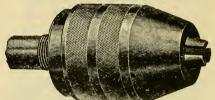
For Holding Straight Shank Drills. With Shank 1/2 inch Diameter.

but a money-saving tool.

We carry in stock sizes for $\frac{1}{8}$, $\frac{5}{52}$, $\frac{3}{16}$, $\frac{7}{32}$, $\frac{1}{4}$ and $\frac{9}{32}$ in. Drills.

Each tool carries only one size Drill. Give size when ordering.

GOODELL'S DRILL CHUCKS.

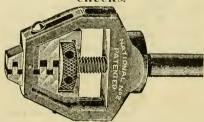


Sizes in Stock. Net price each. No. 15, will take up to ¼ inch Straight
Shank Drills

No. 16, will take up to 1/2 inch Straight

Shank Drills 2.25 Note.—A strong, durable and well made chuck at a moderate price. The Jaws are self-opening and will hold as firmly as the more expensive chucks.

NATIONAL BLACKSMITH DRILL CHUCKS.



Shanks 1/2 and 5/8 inch.

Net price each. No. 15, holding Drill 0 to 3/8 inch.....\$3.25 No. 16, holding Drill 0 to ½ inch..... 3.85 No. 17, holding Drill 0 to ¾ inch..... 4.50 Made especially for Blacksmithing and Carriage Work,

A Chuck that is perfectly balanced.

The construction is so simple that any person can put it together in one minute.

The only Chuck that is strong and powerful, equally adapted for either light, swift or heavy work.

GREEN RIVER TIRE BOLT HOLDER.



GREEN RIVER PATENT RIM WRENCH.



For Nuts or Tire Bolts Inside the Felloe.

For ¼ inch Size the Socket which Holds
the Other Wrenches is Used.

Net price each, complete.....\$1.30

This is a labor-saving tool for taking off and putting on nuts in an awkward place inside carriage felloes. It will be found to make rapid work of what is usually a tedious job with an S-wrench.

No workman with any regard for his time will fail to use this tool, which will soon earn its moderate cost in any shop, small or large. It is made light, handy and strong, and is adapted for use on nuts 1/6, 1/6, 1/4 inch.

LITTLE GIANT NUT WRENCHES.

For Square or Hexagon Nuts



For Bit Brace Use.

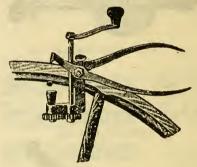
THE COOLIDGE WRENCH.



Fits all sizes. Will not fail you. Always holds.

Indispensable to every Blacksmith. The necessity of every mechanic. Meets the need of every Carpenter. The user of Farming Tools and Wagons has long looked for it.

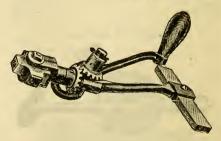
BYRNE'S TIRE BOLT WRENCH CLAMP.



Net price each.....\$2.00

It should be in the shop of every Wagon maker because it reduces the work of tire setting to a minimum. Every machine guaranteed.

LANG'S TIRE BOLT WRENCHES.



Net price each.....\$1.00

Positively the Best Nut Wrench Made for both Old and New Work. Will remove old nuts quicker than any other wrench and it is the only wrench that can be used on $\frac{3}{16}$, $\frac{1}{16}$ and $\frac{3}{8}$ nuts.

Try one and you will use no other.

DOLE & DEMING'S PATENT SPOKE TENON MACHINE.

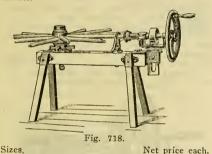
Shipped from Factory.

This machine has been long and favorably known to the carriage tool trade and its sale increases each year. The accuracy of its work adapts it to high grade wheels. It is fitted with the Star Hollow Auger and is arranged for hand or power, which adapts it for use in every shop, whether a large or small number of jobs are manufactured.

A fly wheel and handle has lately been substituted for hand use instead of crank, which is regarded a marked improvement. When power is applied the wheel should be removed.

Felloe boring attachments with round hole bit chuck furnished with all machines unless otherwise ordered. See Fig. 717 for felloe boring attachment.

Speed for power about 1,200 revolutions per minute.



The second secon
No. 3, With Felloe Boring Attachment
and No. 1 and No. 2 Augers, cutting
tenons 7 to 11/4 inches diameter, 4
inches long\$34.20
No. 31/2, With Felloe Boring Attach-
ment and No. 1 and No. 3 Augers,
cutting tenons 7 to 11/2 inches diam-
eter, 4 inches long 38.00
No. 4, With Felloe Boring Attachment
and No. 2 and No. 4 Augers, cutting
tenons 3/8 to 2 inches diameter, 6

No.	4 1/2	, V	Vith	Fell	oe	Bor	ing	Attac	ch-
me	ent,	and	No.	1,	No.	2	and	No.	4
Αι	ıger:	s, cı	itting	ten	ons	7 16	to 2	inch	es
dia	amet	er,	6 inc	hes	long	g			. 51.68
Nos.	3 8	and	3½ f	urni	shed	wi	ithout	No.	1
At	1ger	and	Red	ucer	at	red	netion	n of.	6.08

inches long 45.60

Any	of	the	e ab	ove	sizes	fu	rnisl	ied	with-	
out	: 3	Fello	e B	orin	g At	tacl	ımer	it at	re-	
due	etic	n o	f						• • •	5.3
Nos.	3	and	31/2	arra	anged	to	cut	teno	ns 6	

inches	long,	additional		• • • • • •	• • • •	3.75
Suitable	count	ershaft,	with	tight	and	
loose	nullevs	for thes	e mac	hines		7 60

FELLOE OILERS.



Net price each.

If properly used it will not only preserve your wheels indefinitely, but will save its cost

in the setting the first season.

DOLE & DEMING'S PATENT SPOKE TENON MACHINE.

Shipped from Factory.

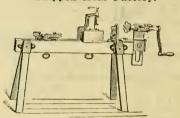


Fig. 716, No. 1.

This cut represents our No. 1 Spoke Tenon Machine, which is adapted to hand use. It is fitted with our No. 1 Star Hollow Auger, and will cut tenons any size from 75 to 1 inch. The hub is held in a self-centering chuck, which can be revolved to present the spokes to the hollow auger. The spokes are held firmly on the rest, and in line with the auger. Thus all the tenons are cut with the shoulders uniform in width and in the same plane. With a slight transformation it can be changed into a boring machine, for boring the felloes for the spokes, giving that accuracy in the work that can be alone attained by

Our new illustration shows the felloe boring attachment on the machine as shipped. Bit chucks with ½ inch round hole always furnished with the felloe boring attachment unless otherwise ordered. When specially unless otherwise ordered. When specially ordered we can furnish chuck with square hole, so the ordinary brace bits can be used in the machine. This size is now furnished complete with legs as shown, without addi-

tional cost.

Boring bits to use in connection with felloe boring attachment will be found on another

Net price each. Sizes. No. 1, With Felloe Boring Attachment. \$18.50 No. 1, Without Felloe Boring Attach-

cuts tenons 5/8 to 11/4 inches..... 24.00

No. 2, Without Felloe Boring Attachment, cuts tenons 3/8 to 11/4 inches.... 19.00 No. 21/2, With Felloe Boring Attachment, cuts tenons 3/4 to 11/2 inches.... 26.00

No. 21/2, Wihout Felloe Boring Attachment, cuts tenons 34 to 11/2 inches.... 21.00 Either size, with No. 1 Auger and Re-

ducer, extra 5.76

SILVER'S NEW TAPER HUB-BORING MACHINE.

Shipped from Factory.

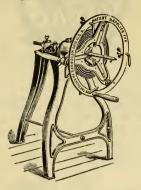


Fig. 706.

With Self-Centering Hub Chuck and Quick-Acting Open Feed Nut.

Centers the Hub Instantly and Accurately. Net price each.

No. 4, For light and medium work, up to 51/2x10-inch hubs, mounted on legs as shown, weight 120 lbs.....\$27.00

No. 5, With two mandrels, for light and heavy work, up to 8x13-inch hubs, mounted on legs as shown, weight 175 Extra bits per set (four).....

DESCRIPTION.

This machine is designed to bore holes in hubs of wheels in which to set the boxes, and it is operated by man power. It will bore straight or any desired taper and cut all necessary recesses, including that at the spokes; consequently the box is set without wedging. Fasten the wheel to the face plate by means of the screw hooks, with the point of the hub turned towards the machine. The cutting bit is in the point of the mandrel and the manis in the point of the mandrel and the mandrel is held stationary. Set the mandrel to make a light cut and turn the wheel rapidly by means of the handle in the face plate. After making the cut it is only necessary to open the feed nut, and the mandrel is quickly withdrawn, ready for another cut. The taper is attained by throwing the back end of the mandrel to one side to a graduated scale. The mandrel to one side to a graduated scale. The wheel is trued at the rim by a simple adjustment of the face plate forward and backward.

The machine in the picture is mounted on a handsome stand, and can be located wher-ever wanted, away from the work bench, and the user is free to go about the wheel with-out being cramped. Some prefer to have the machine on the bench, so it is furnished also without stand at less price, as is displayed in

the price list.

It is made in two sizes, Nos. 2 and 3. The smaller size, No. 2, is especially designed for light and medium work, up to hubs not exceeding 71/4x10 inches. No. 3 is provided with two mandrels, and is adapted to all classes of work up to hubs not exceeding 91/2x13 inches.

SILVER'S POWER TAPER HUB-BOR-ING MACHINE.

Shipped from Factory.

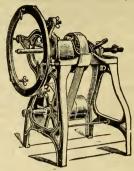


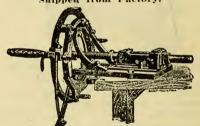
Fig. 708.

Adapted also for Hand Use.
With Self-Centering Hub Chuck and QuickActing Open Feed Nut.
Centers the Hub Instantly and Accurately.

Net price each. With two mandrels, for light and heavy

work, up to 91/2x13-inch hubs, weight 385 lbs.\$58.00

LITTLE GIANT HUB BORER. Shipped from Factory.



No. 3 Special Little Giant Hub Borer. Sizes. Net price each.

No. 2, Special Little Giant Hub Borer, for light and medium work......\$22.50

No. 3, Special Little Giant Hub Borer,

ter of the hub at the spokes, true with the rim, and the right size and shape to fit any box for any hub from a sulky to a wheel having a hub 91/2x13 inches.

PEACE'S IMPROVED SPOKE TENONING MACHINE.



Every machine warranted to give perfect satisfaction. Made of best materials. Adapted to any size spoke or dish of wheel. Cuts tenons ¼ to 1¼ in. Perfectly true. Weighs

A Good Machine for a Little Money. Sizes in stock. Net price each. With the felloe boring attachment......\$9.00 Without felloe boring attachment...... 8.50

WAGON BOX STRAPS.



Eight Pieces to a Set.

	Net price		Net price
Sizes.	per set.	Sizes.	per set.
1/2×10	inch\$0.30	5/8×12	inch\$0.38
½x12	inch33	5/8×14	inch
$^{9}_{16}$ x12	inch35	5/8×16	inch46
⁹ ₁₆ x14	inch40	5/8 x 18	inch50

NECK YOKE CENTER IRONS.



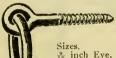
N	et price each.
Complete with	Plate
7 inch Eye	es, 3/8
inch Links,	31/4 X 18
inch Rings .	\$0.131/2
Extra Plates .	

NECK YOKE FER-RULES AND RINGS.



Size					price	
15/8	inch	inside	large	end end	 	.07

NECK YOKE EYES AND RINGS.



Sizes.		price each.
	Eye, $\frac{7}{16}$	\$0.0¢1/
Ring		 \$0.061/2

NECK YOKE EYES.



Siz	es.			Net	price each.
16	inch	iron	 		\$0.041/2

STRAIGHT CENTER CLIPS.



Sizes.					Net price	each.
7 in.	End	Clips,	lengtlı	71/2	inches\$	0.02
½ in.	End	Clips,	length	81/2	inches	.03
1/2 in.	Center	Clips,	length	9	inches	$.03\frac{1}{2}$
	Center				inches	.04
	Center				inches	$.04\frac{1}{2}$
3/4 in.	Center	Clips,	length	12	inches	.07



WELDED END CLIPS.

	es.									each.
16	inch inch									\$0.05
16	inch									.05
1/2	inch									.05

WELDED CENTER CLIPS.



Twisted.



Straight.

	Net price		Net price
Sizes.	each.	Sizes.	each.
½ inch	\$0.04 1/2	½ inch	\$0.03 1/2
9 inch		inch	
% inch			
		, , , ,	

SINGLETREE CENTER CLIPS AND RINGS.

Siz			N	Vet price	each.
16	in.	Clip, 7	in.	Ring	.\$0.06
5/8 3/	in.	Clip; ½	in.	Ring	07
9/4	111.	Clip, 5/8	ın.	King	11



1

CENTER CLIPS AND HOOKS.

Sizes. Net price each. 5% in. Clip, ½ in. Hooks...\$0.08½ 34 in. Clip, 5% in. Hooks... .15

SINGLETREE END CLIPS AND HOOKS.



Sizes. Net price each. $\frac{75}{16}$ in. Clip, $\frac{3}{8}$ in. Hook, in pairs.....\$0.04\frac{1}{2}

SINGLETREE HOOKS AND FERRULES.



Sizes.	Net price each.
11/4 inch small end	
13% inch small end 1½ inch small end	
1% inch small end	

HEAVY FERRULES AND STEEL HOOKS.



Size						Mak	price	oooh
11/4	inch,	small	end	3/8	inch.			. \$0.06
13/8	inch,	small	end	3/8	inch.			07
11/2	inch,	small	end	7	inch.			08
13/4	inch,	small	end	16	inch.			10

SINGLETREE IRONS IN SETS.



One 1st inch Welded Center Clip and 2 End Clips and Hooks 1st inch......15c

SINGLETREE HOOKS.

Size. Net price each. 3% inch3c

SINGLETREE EYES AND HOOKS.

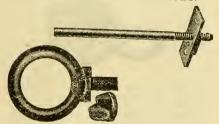


Size. Net price each.

WROUGHT IRON HAMMER STRAPS.



PATENT WAGON BOX RODS.



COMMON WAGON BOX RODS.

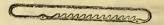


SINGLETREE END STRAPS.



- Constitution of the

Plain,



COUPLING OR REACH PLATES.



Cast Iron. Wrought Iron.
Net price each.
No. 1, for 3½ inch Reach, Cast Iron.....27c
No. 2, for 4 inch Reach, Cast Iron.....35c
No. 3, for 4½ inch Reach, Cast Iron.....37c
No. 4, for 5 inch Reach, Cast Iron.....40c
Per pair.

Wrought Iron, 9x8x6½ inch, sold in pairs with one plate small holes round and one plate small holes square45c

WROUGHT IRON BOX BRACES.

 Sizes.
 Net price each.

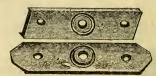
 \$I_6 x 15 ½ inches
 .5c

 ½ x 15 ½ inches
 .6c

CAST BOLSTER PLATES.



WROUGHT IRON BOLSTER PLATES.



	Net price		
	per set.		
	ı30c		
3 incl	ı33c	3½ inch38c	



To Rivet.

WROUGHT WAGON BOX STAPLES.

Size	s.				Net price each.
13/4	inch	wide,	3/4	inch	deep 1c deep 1c deep 1c

WROUGHT WAGON BOX STAPLES.

Size	s.	Net price each.
		wide1c
		wide1c
2	inch	widc1c

To Clinch.

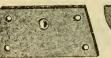
WAGON WRENCHES.



		Nct price each.	
S	izes.	5/8 3/4	
1 7/8	inch	opening8c 11c	
21/4	inch	opening8c 11c	
21/2	inch	opening8c 11c	
		opening8c 11c	

STEEL TONGUE PLATES.

STEEL DOUBLETREE PLATES.





Net price each. Sizes. Steel Tongue Plates 7x61/2x3 inches.....5c Steel Doubletree Plates 41/8 x3 inches.....4c

STEEL WAGON RUB IRON.



Sizes.		price		
5½x2½	inches	 	• • • • •	.10c

THE DICKMAN PATENT RUB IRON.

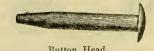


Net price per pair......40c

WAGON KING BOLTS.



Countersunk Head.



Size					et price	
		Countersunk				
11/8	inch	Countersunk	or	Button	Head	20c
11/4	inch	Countersunk	or	Button	Head	25c

PATENT CIRCLE POSTS.



To Clinch. Sizes. Net price each. 5% inch Circle7c

WAGON TONGUE CAPS.



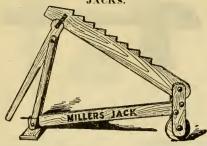
Net price each. With Hold Backs10c

POLE CAP WITH HOLD BACK AND WEAR IRON COMPLETE.



				Net	price	each.
Pole (Cap. v	with Wea	r Iron	complet	e	170
Pole (Caps o	nly				10c
Holdb	ack ar	nd Wear	Iron	ogether.		7c

MILLER'S WAGON OR BUGGY JACKS.



Sizes in stock. Net price each. No. 1, adapted for Buggies and light work, capacity 2,000 lbs.

No. 2, for Heavy Wagon and Trucks, ca-.....60c This is an old and well known jack. Are always reliable and handy.



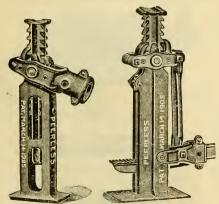
VICTOR WAGON OR BUGGY JACKS.

Cut shows position for holding 1,600 lbs. Weight 8 lbs.

The simplicity of its design and wonderful lifting capacity has made it the favorite with city and country trade. Only one size needed for any car-riage or wagon.

Net price each50c

PEERLESS WAGON AND AUTOMO-BILE JACKS.



Nos. 52 and 53 Nos. 50 and 51.

			LOL							Tirce
		Veh	icles o	f H	eigl	ıt.	Rise.	We	ight.	each.
No.	50	2	tons	10	in.	7	in.	4 1/2	lb.	\$1.75
No.	51	2	tons	12	in.	9	in.	5	1b.	1.75
No.	52	2	tons	11	in.	6	in.	5	1b.	2.10
No.	53	2	tons	13	in.	8	in.	6	lb.	2.75

THE OLIVER JACK.



Sizes in stock.

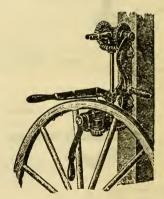
Net price each.

No. 1, will raise vehicles weighing 1 ton.. \$0.60 No. 2, will raise vehicles weighing 2 tons. .95 No. 3, will raise vehicles weighing 3 tons, 1.40

Handled with either hand. Adjustable to any height by sliding the bracket up or down, catching the rivet in any notch desired. Will raise 21/2 in. with one pull of the handle, and locks by passing the center. Lifting range, 24 inches.

Can also be used to set up machinery, pull posts, replace bottom fence rails, raising sills and light frame buildings.

REYNOLD'S TIRE BOLTING MACHINE.



This cut shows the wheel in position.

Net price each A Combination Bolt Clipper, Bolt Wrench and Tire Bolt Holder.

The only machine that will successfully remove burrs, run them on, or clip off the ends of tire bolts. Will fit any sized tap. Either operation can be performed on any ordinary buggy wheel in less than two min-

utes, with perfect ease to the operator.

This machine is patented and the only machine of its kind on the market.

Every part interchangeable and carried in stock at all times and sold at a reasonable price. '

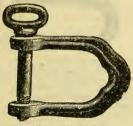
WROUGHT SEAT HOOKS.



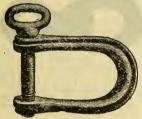
No. 3160.
Size.
Net price each.
3½ and 4 inches long, either length.....4½c

MALLEABLE IRON CLEVISES.

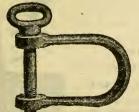
SCREW PIN DOUBLETREE CLEVIS.



No. 300, Net price each............8c 2 in. wide inside. 4½ in. entire length.



No. 335, Net price each......8c 2 in. wide inside. 4½ in. entire length.



						price
		Width	inside.	Entire	length	each.
No. 395		2	inches	4 1/2	inches	8c
No. 420		2	inches	6	inches	10c
No. 427		21/4	inches	6	inches	10c
No. 430		21/2	inches	6	inches	11c
Order	by	Numb	er.			

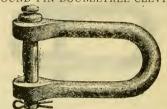
MALLEABLE IRON CLEVISES.

SCREW PIN DOUBLETREE CLEVIS.



Width inside. Entire length. each
No. 480 2 inches 4½ inches 9c
No. 500 2 inches 5½ inches 10c

ROUND PIN DOUBLETREE CLEVIS.



PLOW CLEVIS.

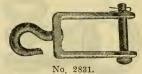


Net Width Entire price length. inside. each. 2 7/8 in. 31/2 C No. 2806, light pattern. 34 in. 4c in. in. 31/2 in.

PLOW CLEVIS.



EVENER CLEVIS AND HOOK.



SWIVEL HOOK.

WROUGHT STEEL DOUBLETREE CLEVISES.

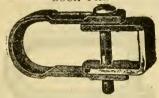
LOCK PIN CLEVISES.



No. 3415A.

Sizes. Net price each.
No. 3415A Clevis, Clip and Stay......10c
Chain Ring Complete, Opening in Clip for
134 in. Doubletree.

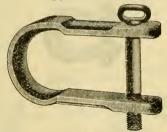
LOCK PIN.



No. 3400A.

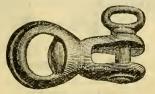
Size, Net price each.
No.3400A Clip for Square Back..........10c
Doubletree, Opening in Clip for 1¾ in.
Doubletree.

SCREW PIN.



Nos. 3424A and 3425B.

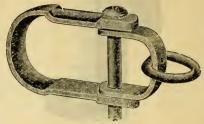
MALLEABLE IRON CLEVISES.
PLOW CLEVIS.



No. 2824.

WROUGHT STEEL DOUBLETREE CLEVISES.

LOCK PIN.



No. 3411A.

Size. Net price each.
No. 3411A, Clevis, Oval, Black Clip and
Stay Chain Ring Complete, Opening in
Clip for 134 in. Doubletree...........10c

DOUBLETREE STAPLES.



No. 215.

3¼ in. center to center.
5 in. length of shank.
½ in. diam. of shank.
7¼ in. entire length.
Net price each, threaded, with nuts......156

CHAIN SWIVELS.



No. 7715.

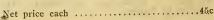
A B C D E F G 3 3½ 4½ 4¾ 5 5¾ 7½ inches long. $\frac{3}{3}$ $\frac{4}{3}$ $\frac{4}{5}$ $\frac{1}{5}$ $\frac{1}{6}$ $\frac{1}{6}$ in. Eye. $\frac{1}{6}$ $\frac{1}{6}$

COLLINS

WAGON

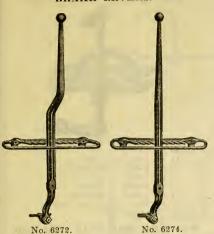
BRAKE.

Note. — The only
Rolled Steel Brake
made. Pawl, Circle
and both Levers all
Rolled Steel.





BRAKE LEVERS.



Description of No. 6272.

В D Α in. Lever. 24 28 32 36 1434 in. length of Ratchet. 121/2 1434 13 1/2 7 in. Connecting Bolt. 7 in. height from bot-10 10 tom Bracket hole to c. of Knife.

Description of No. 6274.

.65

.70 net price each.

.50

\$0.33

A 24 28 in. long. in. Connecting Bolt. in. length of Ratchet. 3/8 131/2 143/4 121/2 in. height from bottom 11 11 hole to c. of Bracket Knife. .50 .60 net price each. \$0.36

FOOT LEVERS.

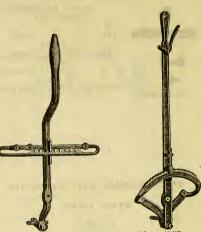


INSIDE PULL.

19½ in. length of Lever. 8 in. drop of Brace. 10½ in. Toe Board. 90c. net price each. Used with No. 6392

Center Brake.

BRAKE LEVERS.



No. 6275.

No. 6277.

Description of No. 6275.

9 in. length of Ratchet. 5% in. Bracket hole.

⁵₆ in. Connecting Bolt. 10½ in. height of bottom Bracket hole to c. of Knife.

45c. net price each.

Description of No. 6277.

A B 31 in. length of Lever.

For light For heavy farm wagon work.

60c 65c net price each.

To be attached to the side of the body.

Fitted ready for use.

No. 6278.

Same as No. 6277 except it ha

Same as No. 6277, except it has a Foot projection and is adapted to attach to the bottom and sides of body.

A B 31 in. length of Lever.
For light For heavy farm wagon work.
60c 65c net price each.

FOOT LEVERS.



INSIDE PUSH.

9 in. Long Lever. 234 in. Short Lever. ½ in. Connecting Rod end. 47c net price each.

No. 6285.

INSIDE PULL.

A B
9 10 in. length of Lever.
8½ 8½ in. length of Plates.
½ ½ in. Connecting Roomend.
31c 35c net price each.
INSIDE PUSH.
AX BX

9 10 in. length of Lever. 8½ 8½ in. length of Plates. ½ 5% in. Connecting Roce end.

31c 35c net price each.

FOOT LEVERS.



WITH RATCHET SIDE PULL. B Α 141/2 14 1/2 in. length Lever. 12½ in. Ratchet. 121/2 in. length of Connecting 7 in. Rod end. \$0.40 \$0.40 Net price each.

FOOT LEVERS. WITH RATCHET INSIDE. PUSH.



No. 6286.

A 11 11 in. length over all. 8 in. length of long end. 8 3 in. length of short end. 9 in. length of Plate. 4 in. radius of Ratchet. 3 9 4 5/8 in. Connecting Rod end. \$0.50 .52 Net price each.

TURNBUCKLE AND WROUGHT

STUB ENDS.

Threaded.



No. 6382. KATCHET SIDE PULL ROD END.

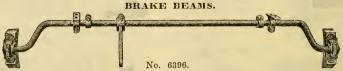
6295. No. В C D Length 43/4 4 7/8 51/8 4 7/8 Connecting rod 3/8 Net price each....\$0.07 .08 .09

RELIABLE WAGON BRAKES.

BRAKE BEAMS.



1 11/8 11/8 in. Shoe Journal Box. 38 to 50 38 to 56 in. Body 38 to 50 38 to 56 63/4 63/4 in. drop to center of Shoe. 63/4 63/4 1/3 in. for Connecting Rod. in. width of Shoe. 5/8 23/4 334 ft. 2 in. -23/4 33/4 4 ft. 8 in. 5 ft. 2 in. 4 ft. 8 in. \$5.00 Track. \$5.25 \$3.40 \$3.50 Net price each.



FOR SPRING WAGONS AND SIMILAR VEHICLES.
FOR INSIDE PUSH OR PULL BRAKE WOOD FRICTION BLOCK.
WITH WOOD FRICTION BLOCK.

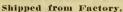
В D 7/8 11/8 in. Brake Roller. 5% 6¼ 6% in. length Lever center to center.

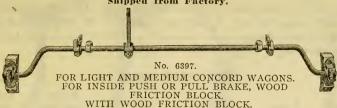
134 134 2½ in. width of Shoe.

15 15 1.70 \$2.30 Net price each.

IMPORTANT.—In ordering, always state whether 4 ft. 8 in. or 5 ft. 2 in. Track is wanted.

BRAKE BEAMS.





WITH WOOD FRICTION BLOCK.

A B D

7/8 1 11/8 in. Brake Roller.

57/8 61/4 65/8 in. length Lever center to center.

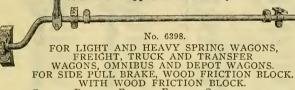
13/4 13/4 21/8 in. width of Shoe.

7/6 7/6 3/8 in. Connecting Rod Bolt.

\$1.55 \$1.70 \$2.30 Net price each.

BRAKE BEAMS.

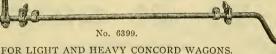
A B & D shipped from Factory.



C D E F G В 7/8 11/4 11/8 11/8 1¼ in. Brake Roller. 8½ in. length Lever center to center. 1 1 7½ 1¾ 71/2 8 8 81/2 in. width of Shoe. 13/4 21/8 21/8 3 3 7 in. Connecting Rod Bolt. \$3.40 Net price each. \$1.55 \$1.70 \$2.30 \$2.50 \$3.25 \$1.90

BRAKE BEAMS.

Shipped from Factory.



FOR LIGHT AND HEAVY CONCORD WAGONS.

FOR SIDE PULL BRAKE, WOOD FRICTION BLOCK.

WITH WOOD FRICTION BLOCK.

B C D E

Α	В	С	D	E
7/8	1	1	11/8	11/8 in. Brake Roller.
7	71/2	71/2	8	8 in. length Lever center to center
13/4	13/4	2 1/8	21/8	3 in. width of Shoe.
5	5	3/8	3/8	75 in. Connecting Rod Bolt.
\$1.55	\$1.70	\$1.90	\$2.30	\$2.50 Net price each.

BRAKE SHOES WITH SLIP BLOCKS.



BRAKE SHOES WITH SLIP BLOCKS.

No. 6369.
Iron Friction Block.
With perfect contact attachment.

A	В		E	
7/8	1	1	11/8 in. brake roller.	
13/4	13/4	21/8	3 in. width of shoe.	
7	7	71/2	8 in. length of shoe.	
\$0.90	.95	1.30	2.25 Net price per pair.	



No. 6362. Wood Friction Blocks with perfect contact attachment.

A	В	C	E				
7/8	.1	1	11/8	in.	brake	roller	
13/4	13/4	21/8	3	in.	width	of sh	ioe.
7	7	71/2	8	in.	length	of s	hoe.
\$0.6	0 .66	74	1.00	Net	price	per	pair.

BRAKE COMBINATIONS.

For our customers' convenience in ordering we herewith list a few of the most popular brake combinations, the component parts of which may be found on the three preceding pages. In ordering always specify whether 4 foot 8 inch track or 5 foot 2 inch track is desired; 4 foot 8 inch track will always be sent unless otherwise specified.

FOOT LEVER BRAKES.

				Wagon	Net Prices
Comb. Nos.	Lever.	Rod End.	Brake.	Capacity.	per set.
60 A	6285	6295 D	6396 A	1000 lbs.	\$2.11
60 B	6285	6295 D	6396 B	1500 lbs.	2.26
61 A	6287 A	6295 A	6396 A	1000 lbs.	1.93
61 B	6287 A	6295 A	6396 B	1500 lbs.	2.11
61 D	6287 B	6296 B	6396 D	2800 lbs.	2.73
62 A	6286 A	6295 D	6396 A	1000 lbs.	2.12
62 B	6286 A	6295 D	6396 B	1500 lbs.	2.26
62 D	6286 B	6295 F	6396 D	2800 lbs.	2.93
70 A	6285	6295 D	6397 A	1000 lbs.	2.16
70 B	6285	6295 D	6397 B	1500 lbs.	2.26
71 A	6287 A	6295 A	6397 A	1000 lbs.	1.93
71 B	6287 A	6295 A	6397 B °	1500 lbs.	2.12
71 D	6287 B	6295 B	6397 D	2800 lbs.	2.73
72 A	6286 A	6295 D	6397 A	1000 lbs.	2.16
72 B	6286 A	6295 D	6397 B	1500 lbs.	2.36
72 D	6286 B	$6295 \mathrm{F}$	6397 D	2800 lbs.	2.90
84 A	6290 A	6295 A	6398 A	1000 lbs.	2.00
84 B	6290 A	6295 A	6398 B	1500 lbs.	2.20
84 D	6290 B	6295 B	6398 D	2800 lbs.	2.80
85 A	6282 A	6295 B	6398 A	1000 lbs.	2.00
85 B	6282 A	6295 A	6398 B	1500 lbs.	2.16
85 C	6282 B	6295 B	6398 C	2400 lbs.	2.45
85 D	6282 B	6295 B	6398 D	2800 lbs.	2.85
		HAND LEVE	DDAKES		
		HAND LEVE	de Brancis.		
80 A	6272 A	6295 A	6398 A	1000 lbs.	\$1.95
80 B	6272 A	6295 A	6398 B	1500 lbs.	2.15
80 C	6272 B	6295 B	6398 C	2400 lbs.	2.50
80 D	6272 B	6295 B	6398 D	2800 lbs.	2.90
80 E	6272 C	6295 C	6398 E	3000 lbs.	3.24
80 F	6272 D	6295 C	6398 F	3200 lbs.	4.04
80 G	6272 D	6295 C	6398 G	3200 lbs.	4.19
81 A	6274 A	6295 A	6398 A	1000 lbs.	1.98
81 B	6274 A	6295 A	6398 B	1500 lbs.	2.13
81 C	6274 B	6295 B	6398 C	2400 lbs.	2.48
81 D	6274 B	6295 B	6398 D	2500 lbs.	2.90
81 E	6274 C	6295 C	6398 E	3000 lbs.	3.24
82 B	6278 A	6295 B	6398 B	1500 lbs.	2.50
82 Đ	6278 B	6295 B	6398 D	2800 lbs.	3.08
83 D	6275	6295 B	6398 D	2800 lbs.	2.83
90 D	6275	6295 B	6399 D	2800 lbs.	2.83

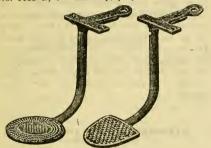
ROLLED STEEL STEPS.



No. 1405.

No. 1415.

Net price per pair. Sizes. No. 1405 B, 634 in. drop, projection 5 in. 25c No. 1415 A, 6 in. drop, projection 6 in. 30c No. 1415 B, 7 in. drop, projection 5 in. 30c



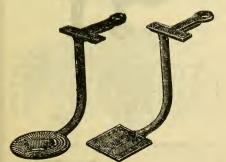
No. 1428.

No. 1439.

in. drop, projection 6 in. .30c No. 1428 A, 6 in. drop, projection 6 in. 30c No. 1430 A, 51/2 in. drop, projection 5 in. 30c

RUBBER PAD STEPS.

With Rolled Steel Shanks.



No. 1320.

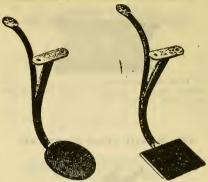
Sizes.

No. 1305.

Net price per pair. No. 1320 A, 6 in. drop, projection 6 in...50c No. 1320 B, 7 in. drop, projection 5 in...50c No. 1305 A, 6 in. drop, projection 6 in...55c No. 1305 B, 7 in. drop, projection 5 in...55c

Note.-Order by number.

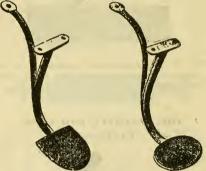
MALLEABLE RUBBER PAD STEPS.



No. 3122.

No. 3121.

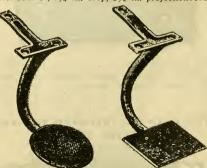
Sizes. Net price per pair. No. 3122 A, 6½ in. drop, 6¼ in. projection.65c No. 3121 A, 6½ in. drop, 6 in. projection.65c



No. 3332.

No. 3123.

Sizes, Net price per pair. No. 3123 B, 6½ in. drop, 6¼ in. projection.65c No. 3342 A, 5¼ in. drop, 5½ in. projection.60c



No. 3120.

No. 3331.

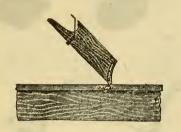
Sizes. Net price per pair. No. 3120 A, 6½ in. drop, 6 in. projection. 65c No. 3331 A, 5¼ in. drop, 5 in. projection. 60c

These are the finest Rubber Steps made. Very handsome and for first class work. Order by number.

REVERSIBLE SEAT FASTENER.

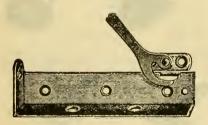


THE HANDY SEAT FASTENER.



Net price per dozen sets........\$1.35 Note.—A very convenient and handy Seat Fastener.

THE SECURITY END GATE FASTENER.



THE RAYMOND IMPROVED TONGUE AND POLE SPRING.



or tongue. The total length is 18 inches.

KEYSTONE BRAKE SPRINGS.

CHIII MILITO

Sizes in stock,

Length Over all. 4 in.	Outside Diam.	Size Wire. 12	Net price each. 10c
6 in. 8 in.	$1\frac{7/8}{16}$	10 9	15c 18c
10 in. 12 in. 14 in.	1½ 1¼ 1¾ 1¾	8 7 6	24c 30c 40c
16 in.	1 16	5	60c

Note.—Our Keystone Brake Springs are made of high grade spring steel and are far superior to the common coppered market wire springs sometimes sold. They can be distinguished from others by the blue temper color, which gives a fine finish. They are not japanned except to order. We carry in stock the seven sizes listed. The 14-inch spring can be used for heavy brakes or light poles. The 16-inch spring is our regular tongue, or pole spring, and will easily hold a weight of 150 lbs. Heavier pole and tongue springs made to order, in fact we make any size spring wanted.

FINISHED SHAFT AND POLE COUPLINGS.

Complete With Eyes.



								Net price
S	izes				p	er	pair.	per doz.
7/8	in.	Light	16	in.	Bolt		22c	\$2.25
1	in.	Light	3/8	in.	Bolt	5	22c	2.25
1	in.	Heavy	7	in.	Bolt	5	24c	2.45
11/8	in.	Heavy	7	in.	Bolt	:	30c	3.75
11/4	in.	Heavy	7	in.	Bolt	!	38c	4.40

FRONT BAR EYE BOLTS.



 Size.
 Net price each.

 1/8 inch Shank
 8c

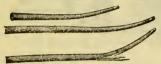
 1/2 inch Shank
 11c

SHAFT AND POLE EYES.



		Pole.	
		Net price pe	r pair.
Sizes.		Shaft.	Pole.
7/8 X 16	inch	8c	8c
1 x3/8	inch	8c	8c
$1 \times \frac{7}{16}$	inch	8c	8c
		10c	10c
11/4 x 7/8	inch	12c	12c

STEEL SOCKET SHAFT ENDS.



It costs less and is better than repairing any other way. Easy to put on either new or old work.

Sizes.		Net price each.
1½ for Buggies		25c
15% for Surreys	Carte Spring	Wagone 35c

The Steel Socket Shaft Ends are used for repairing broken shafts on Buggies, Carts and Express Wagons, in the short time of five or ten minutes, made of Double Tube Steel, the inner tube being pressed in the outer tube, giving them so much greater strength that the shaft will break in any other place than where repaired, and being fully japanned they are equal to the best leather finish when on the shaft.

LINDAQUIST WAGON TONGUE SUP-PORT.



Sizes.		Net price each
	in. steel, suitable	
nary p	urposes	\$1.15
No. 2. 3/4	in steel, suitable f	or the heav-
_iest_pu	rposes	1.40

Note.—Acknowledged to be the best support for lumber wagon tongues on the market. Easily and quickly applied, it takes the weight from the horses' shoulders, keeps the tongues straight, and at the right height for hitching up. A ready seller, and once used always used.

AXLE CLIPS.



				No.	2100.			
		is inch	Sha	nk.	7/8 inch	Wide.		
Size	s.				Net	price	per	doz.
No.	21/4.	Flat	part	21/4	in			.18c
No.	23/4.	Flat	part	23/4	in			.18c
No.	31/4.	Flat	part	31/4	in			.18c
No.	33/4.	Flat	part	33/4	in			.20c
No.	4 1/2.	Flat	part	41/2	in			.25c
No.	4 3/4.	Flat	part	4 3/4	in			.28c
No.	51/4.	Flat	part	51/4	in			.30c
No.	6.	Flat	part	6	in			.32c

NORWAY IRON AXLE CLIPS.



No. 2105.									
		15 inch	Shar	1k. 3	% inc	h W	'ide.		
Size	S.			·	N	et p	rice	per	doz.
No.	21/4.	Lengtl	ı of	Flat	part	21/4	in.		.21c
No.	23/4.	Lengtl	ı of	Flat	part	23/4	in.		.21c
No.	31/4.	Lengtl	ı of	Flat	part	31/4	in.		.21c
No.	33/4.	Lengti	ı of	Flat	part	33/4	in.		.24c
No.	41/4.	Length	ı of	Flat	part	4 1/4	in.		.26c
No.	4 3/4.	Lengtl	h of	Flat	part	4 3/4	in.		.30c
No.	51/4.	Lengtl	ı of	Flat	part	51/4	in.		.33c
No.	6.	Lengtl	ı of	Flat	part	6	in.		.38c
		HEAV	VY	AXL	E C	LIP	s.		

		No. 2108.	
		3/8 in. Shank. 11/4 in. Wide.	
Size	s.	Net price per d	
No.	31/2		
No.	4.	Flat part 4 inches	
No.	4 1/2	Flat part 41/2 inches	30c
No.	5.	Flat part 5 inches	
No.	51/2	Flat part 51/2 inches	
No.	6.	Flat part 6 inches	
No.	61/2	Flat part 6½ inches	
No.	7.	Flat part 7 inches	50c
		SPRING BAR CLIPS.	

	1 ⁵	inch	Sha	nk.	5% inch			
Size	S.				Net	price	per doz	Z.
No.	4.	Flat	part	4	inches.		25	c
No.	4 3/4.	Flat	part	43/4	inches.		30	c
	51/4.	Flat	part	51/4	inches.		33	С
	53/4.	Flat	part	53/4	inches		35	С
	63/8.				inches.		38	c
No.					inches.			
	73/4.				inches.			
110.		TATE!			DE DA			



No. 2110. Long End 2 inch, Short End 11/4 inch. Shanks 15/6 inch.

Sizes.			Ī	Net	price	per	doz.
No. 3.	Flat	part	3	inches			.20c
No. 33/4.	Flat	part	33/4	inches			.240
No. 41/4.	Flat	part	4 1/4	inches			.28c
No. 434.	Flat	part	4 3/4	inches			.32c

TIMKEN SIDE BAR CLIPS.



Both ends 21/4 inches long, Shank 15 inch diameter.

Sizes.
No. 2½. Length of Flat part 2½ inches...28c
No. 3. Length of Flat part 3 inches...30c

FINISHED BEVELED EDGE SHAFT IRONS.



Size	s.				N	et	price	per	pair.
11/8	Wide,	1/4	Thick,	7/8	Eye,	3/8	Bolt.		37c
			Thick,						
11/8	Wide,	16	Thick,	1	Eye,	16	Bolt.		.41c
11/4	Wide,	16	Thick,	1	Eye,	76	Bolt.		44c

ROLLED STEEL POLE "T" IRONS.

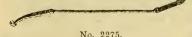


Sizes.	Net price each.
Top T 1/8 x 1/4 in., 10 in. long, in., 11 1/2 in. long	Shank 7/8 x 1/4
Bottom T 1x1¼ in., 9¾ in. 1¼x¼ in., 19¾ in. long	long, Shank

ROLLED STEEL POLE HAMMER STRAPS.



BRACES.

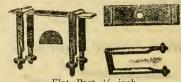


Size								t price	
								round.	
1	in.	Eye	for	16	Bolt	18	in.	round.	 48
11/8	in.	Eye	for	16	Bolt	16	in.	round.	 49

SHORT SPRING CLIPS.



THREE PIECE BUGGY SADDLE CLIPS.



Flat Part 1/2 inch.

Half Round Shanks 15 inch.

Siron		Net price per doz. sets.
$1\frac{1}{4}x^{2}\frac{1}{4}$	Flat part	80c
11/4 x2 1/2	Flat part	80c
11/4 x 23/4	Flat part	80c
11/4 x3	Flat part	80c
		85c
		85c
		80c
		90c
		90c
		90c
		95c
1 1/2/10/2	Flat part	95c
1 /2 X 4	riat part	

CANOPY TOP STANDARDS AND SOCKETS.





Standard.

		Standard.	0	Socke	rt .
Sizes.					per doz.
		Standards			
Canopy	Top	Sockets			72c

FINISHED KING BOLTS.



Flanged Pattern.

Sizes.			Net price each.
No. 1.	1/2	inch	Shank16c
			Shank17c
			Shank21c
			Shoule 30c

FINISHED KING BOLT YOKES.



KING BOLT YOKE AND BRACE.



No. 130. Double Reach.

Sizes.			price	
No. 130	, Double	Reach	 	25c

KING BOLT YOKE AND BRACE.



Nos. 54 and 50, Single Reach.

Sizes.	Net price each.
	Reach

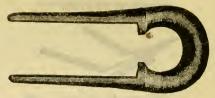
FLAT PATTERN HEAD BLOCK PLATE.



Wrought Iron.
Cut represents the Underside.

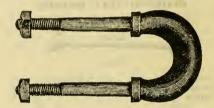
Sizes.				N	Vet p	rice	each.
	For 11/4						
King	Bolt						27c
No. 2,	For 11/4	in.	Spring	and	for	No.	2
King	Bolt						27c
No. 3,	For 13/8	in.	Spring	and	for	No.	2
King	Bolt						30c
No. 4,	For 11/2	in.	Spring	and	for	No.	3
King	Bolt						35c

FORGED STEEL CLEVIS.



No. 20 CLEVIS.

FORGED STEEL DRAW BOLTS.



No. 21. DRAW BOLTS.

DOUBLE PERCH HEAD BLOCK. PLATES.



No. 102. Socket Pattern.

 Sizes.
 Net price each.

 No. 1, for 1½
 Spring, No. 1 King Bolt,

 12 in. Circle.
 80c

 No. 2, for 1½
 Spring, No. 2 King Bolt,

 12 in. Circle
 \$1.00

DOUBLE PERCH HEAD BLOCK PLATES.



No. 98. Socket Pattern.

FINISHED HEAD BLOCK AND

PERCH PLATES.



No. 92 For Perches.

Net price each. No. 11/4 in. Spring, 12 in. Circle and 3/4 in. Perch For 11/4 in. Spring, 12 in. Circle and 7/8 in. Perch80c

FINISHED STAY BRACES.



Sizes.									-	N	e	t	p	r	i	26	2	1)(ei	I	a	ir	
Brewster																						. 1	30	2
Timken							÷										ı					.1	80	2

FINISHED BODY LOOPS.



With 12 in. Cover Flat for Buggies.

Size of oval 7/8× 7/6.

No. 1118A, 5 inch Drop, 7 inch Flat....45c
No. 1118C, 5½ inch Drop, 7 inch Flat....45c
No. 1118G, 6½ inch Drop, 7 inch Flat....45c
No. 1118B, 6 inch Drop, 7 inch Flat....45c
No. 1128A, 5 inch Drop 22 and 30 inch
Elektrope 155c. Flat No. 1128E, 6 inch Drop, 22 and 30 inch Flat . Flat No. 1128G, 6½ inch Drop 22 and 30 inch No. 1128-2 pieces 22 inch. Flat and 2 pieces 30 inch Flat to set.

STRAIGHT SURREY LOOPS.



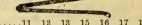
SURREY.

Net price per pair. No. 1160D, 11 inch oval, 12 inch Flat.....52c Oval measurements are between inside of head and flat part on top of loop.

SWAGED STUMP JOINTS. .



CONCEALED JOINTS.



Sizes11 12 13 15 16 17 18 in. Net price, pair 8c 8c 8c 9c 10c 11c 12c

FINISHED TOP BRACES.



For 3 or 4 Bow.

				per pair.
		Japanned		
1	Bow	Japanned	 	 50c

WROUGHT BODY CORNER IRONS.



FLAT TOP.

Wi	dth.					N	et	1	r	ice	per	set.
		inch inch										7c 8c 9c

OVAL TOP

0 11111	
Width.	Net price per set.
1/4 and 5 inch	16c
Two long and two sl	ort connections in a
set.	

WROUGHT IRON CLIP TIES.



Net price per lb. Sizes. 1, 11/8, 11/4, 13/8, 11/2x 1/5 Hole Plain..5c 11/8, 11/4, 13/8, 11/2, 13/4x 3/8 Hole Plain..5c

FELLOE PLATES.



Ten Pounds in a Box.

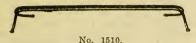
Sizes.

WROUGHT IRON TOE RAILS.



No. 1525.

Size								each.
No.	20,	22,	24,	26.	 	 	 	 13c
No.	28,	30			 	 	 	 15c



Net price each. No. 20, 21, 22 inch....

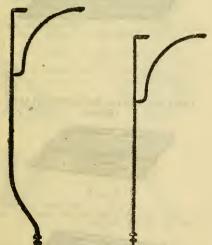
LAZY BACK ARMS AND STANDARDS.



Two Back and Two Side Irons Make One Set.

Net price per set.

FINISHED CANOPY TOP IRON.



No. 1800, Back.

No. 1800, Front.

Sizes.

Net price per set.
1800, Back, 5% in. round, 53 in. high....\$1.20 1800, Front, 5/8 in. round, 361/2 in. high.. 1.20

Height measured from collar to top. A set consists of four pieces.

MALLEABLE IRON TOE RAILS.



No. 10, For Piano Bodies. Sizes. Net price each. No. 10, For Piano Bodies 20, 22, 24, 25

BAILEY BODY HANGERS.



No. 1010.

Buggy Size, to Bolt on Spring.

Width, in. out to out.. 18 19 20 21 22 23 Drop, inches 4 4 4 4 4 4 Net price per pair....\$0.80 .80 .80 .80 .80 .80 Holes in Spring Pad 31/2 inches center to center. Give size and number.

BAILEY BODY HANGERS.



No. 1005.

Buggy Size, to Clip on Spring.

Width, in. out to out.. 18 19 20 21 22 23 4 4 Net price per pair.....\$0.80 .80 .80 .80 .80 Holes in Spring Pad 31/2 inches, center to

center. Give size and number.

READ'S REIN SUPPORTERS.

REINS NEVER UNDER HORSE'S TAIL OR ENDS OF HIP STRAP.



A simple, practical, convenient, common sense device. Prevent accidents, save annoyance, add to the comforts and pleasure of driving. Their simplicity, practical workings, ornamental appearance, little cost, make them appeal strongly to the driving public. Heavily nickeled or brass plated over a heavy copper plate, or highest grade imitation rubber. Net price per dozen pair.....\$1.50

Greatest selling specialty on earth. On display cards. Nickel and Imitation Rubber retail 25 cents a pair. Brass 30 cents a pair.

BRADLEY ADJUSTABLE FOOT RAIL.



Net price each.

20, 22, 24 in. long, 3½, 4, 4½ in. high...25c Give height and length when ordering. Adjustable to suit different heights of drivers. No possibility of rattle. Easily shifted and securely fastened.

READ'S REIN HOLDERS.

REINS ALWAYS IN PLACE WHERE THEY OUGHT TO BE.



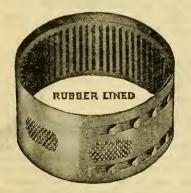
No unfastening reins, running through rings in adjusting. Simple twist of rein, it's in place and stays there. Accidents due reins catching under shaft or trace ends avoided. Simple, practical; finished heavily nickeled or brass plated over a heavy copper plate, or highest grade imitation rubber,

Net price per dozen

pair\$1.50 Sales more than all ters comined. On disothers comined. play cards. Nickel and Imitation Rubber retail 25 cents a pair. Brass 30 cents a pair.

READ'S HORSE TAIL TIE.

INSTANTLY ATTACHED. DON'T IRRI-TATE OR INJURE HAIR. NO STRAPS TO BREAK, SHRINK, STRETCH. WONDERFUL SELLER.



Patent Pending.

A handsome device, with no hinges, buckles or metal teeth to cut the hair. Never lets go. Lined with corrugated rubber. Made of spring steel, heavily nickeled or brass plated over a

heavy copper plate. On display cards. Nickel retails 25 cents. Brass 30 cents. Net price per dozen, Nickel\$1.50 Net price per dozen, Brass 1.75 ROLLED STEEL BUGGY RUB IRONS.



Sizes. Net price per pair. No. 1250 A, 5 in. long, 7/8 in. wide inside No. 1250 B, 6 in. long, ½ in. wide inside of flange
No. 1250 C, 7 in. long, ½ in. wide inside of flange No. 1252 A, 5 in. long, 11/4 in. wide inside of flange No. 1252 B, 6 in. long 11/4 in. wide inside

ROLLED STEEL SPRING WAGON RUB IRONS.



Sizes. Net price per pair. No. 1254 A, 5 in. long, 13/4 in. wide inside

FANCY END ROLLED STEEL RUB TRONS.



Sizes. Net price per pair. No. 1264 A, width 21/4 in., flange 1 in., length 6 in., No. 1264 C, width 21/4 in., flange 1 in., length 7 in.9c

ROLLED STEEL ROLLER CHAFE IRONS.



1205 A.

Net price per pair. No. 1205 A, 5 in. long, 21/4 in. wide....18c For End Spring Buggies.



No 1200 A.

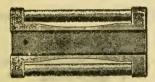
Net price per pair. No. 1200 A, 5 in. long, 1½ in. wide.....15c For Side Bar Buggies.

ROLLED STEEL ROLLER CHAFE BRONS.



No. 1215 A.

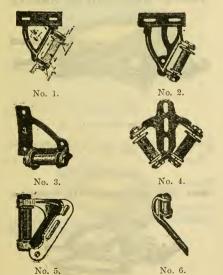
No. 1215 A, 45% in. long, 234 in. wide...20c For Stanhopes, Phaetons, etc.



No. 1225 A.

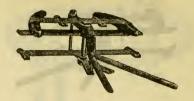
No. 1225 A, 5 in. long, 2½ in. wide.....20c For cut under Jobs.

GANON ANTI-FRICTION ROLLER WEAR IRONS.



Sizes. Net price per pair.
No. 1, For Buggies and Surreys. .50c
No. 2, For Buggies and Surreys. .55c
No. 3, For Phaetons .55c
No. 4, For Cut under Surreys .50c
No. 5, For Side-bar Buggies .50c
No. 6, For Concords and Phaetons .55c
Note.—Give number when ordering.

THE HERBRAND FIFTH WHEELS.



Nos. 51/2 and 501/2.

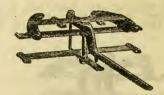
Sizes.		Net price each.
		\$1.42
No. 50½, Two	Seat	1.67

WROUGHT SETS.

Top plate, wrought. Back coupling wrought. Reach Iron, wrought. King Bolt, wrought. Bottom Plate, malleable. Axle Plate, malleable.



Nos. 66 A and 66 1/2.



Nos. 6 A and 16 A.

 Sizes.
 Net price each.

 No. 6½ Λ, One Seat, with Back Perch Irons
 \$1.24

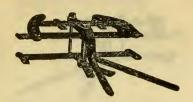
 No. 16 Λ, Two Seat, with Back Perch Irons
 \$1.50

THE A SETS.

Top Plate, wrought. Reach Iron, wrought. King Bolt, wrought. Bottom Plate, malleable. Axle Plate, malleable. Back Coupling, malleable.

Note.-Give number when ordering.

THE HERBRAND FIFTH WHEELS.



Nos. 5 A and 50 A.

THE A SETS.

Top Plate, wrought. Reach Iron, wrought. King Bolt, wrought. Bottom Plate, malleable. Axle Plate, malleable. Back Coupling, malleable.



THE A SETS.

Top Plate, wrought. Reach Iron, wrought. King Bolt, wrought. Bottom Plate, malleable. Axle Plate, malleable. Back Coupling, malleable.



WROUGHT SETS.

Top Plate, wrought. Back Coupling, wrought. Reach Iron, wrought. King Bolt, wrought. Bottom Plate, malleable. Axle Plate, malleable.

Note.-Give number when ordering.

THE HERBRAND FIFTH WHEELS.

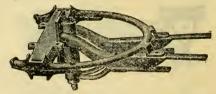


THE "E" BRAND FIFTH WHEELS.



No. 947 C.

THE "E" BRAND FIFTH WHEELS.



No. 952 C.

Quarter Bottom Circle.

THE "E" BRAND FIFTH WHEELS.

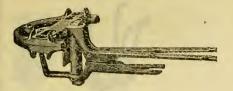


No. 965 H.

Single Straight Perch End Spring Gears.

Sizes. Net price each.
No. 965 H, 12 inch Circle, 1 Perch
Buggies\$1.10
Note.—Give number when ordering.

THE "E" BRAND FIFTH WHEELS.



No. 950.

For Full Drop Perch Gears End Spring or Side Bar.

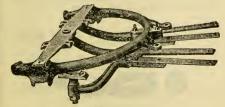
Sizes.		Net price each.
No. 950 A, 9	inch Circle, One	Seat, Sin-
No. 950 C, 9	inch Circle, One	Seat, Dou-
	inch Circle, Two	
gle Perch .		1.00
	inch Circle, Two	

THE "E" BRAND FIFTH WHEELS.



Anti-Rattler Attachment.

BREWSTER FIFTH WHEELS.



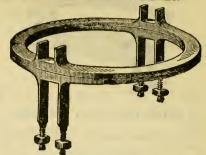
No. 930.

With Anti-Rattler Attachment. For Two Passenger Vehicles. Double Perch.

Double Saddle Clip.

Sizes. Net price each.
No. 930 A, 12 inch Circle, One Seat.... \$.90
No. 931 A, 12 inch Circle, Two Seat.... 1.10

WROUGHT FIFTH WHEELS.

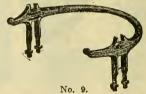




No. 19.-Platform Circles.

	110. 10.	rationin Circles.	
Sizes.		Price per pai	r.
5 x1 1/4 x24	inches	\$0.9	96
3/8 x 1 3/8 x 2 6	inches		25
Te X1 1/2 X28	inches	1.5	0
1/2 X1 1/2 X30	inches	1.7	70

DERBY FIFTH WHEELS.



Sizes.

No. 9.

Net price each.

No. 9, 1

in. Axle, 5% Iron, 12 in. Circle..45c

No. 9, 1½ in. Axle, ½ Iron, 12 in. Circle..50c

No. 9, 1½ in. Axle, ¾ Iron, 14 in. Circle..50c

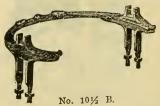
No. 9, 1½ in. Axle, ¾ Iron, 14 in. Circle..50c

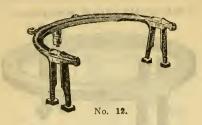
No. 9, 1½ in. Axle, ¾ Iron, 14 in. Circle..75c

No. 9, 1½ in. Axle, ¾ Iron, 16 in. Circle..75c

No. 9, 1¾ in. Axle, ¾ Iron, 16 in. Circle..80c

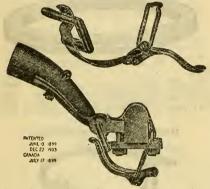
DOUBLE REACH DERBY FIFTH WHEELS.





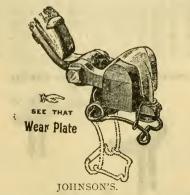
BREWSTER FIFTH WHEELS.

IMPROVED FERNALD QUICK SHIFTERS.



Net price per doz. pairs......\$2.00

The Fernald isn't bolted to the pole or shafts and requires no special shaft eye or lug. Can be changed from shafts to pole or pole to shafts in an instant without tools of any kind.



KEYSTONE WIRE.

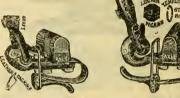


Net price per doz. pair......25c

BURTON'S ANTI-RATTLER.

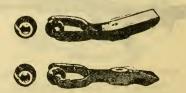


THE BRADLEY SHAFT COUPLING.



BRADLEY SHAFT AND POLE ENDS.

Shaft End.



Pole End.

Size	s.					Net	price	per	pair.
No.	8,	Shaft	or	Pole	Ends	onl	y		.25c
No.	9,	Shaft	or	Pole	Ends	onl	y		.30c

MALLEABLE IRON SAND BANDS.

	Sizes.	Net price per set.
	2½ inch	\$0.12
	23/4 inch	
	4 inch	
No. 7412.		

MALLEABLE RIM

BANDS.

Size	s. Net price per set.					
2	to 25/8 inch\$0.20					
	to 3 inch22					
	inch					
	inch					
	inch					
31/2	inch					
Turned, Papered.						



134 inches deep.

NICKEL PLATED POLE TIPS.



Sizes	S.	110. 0	Net price each
1 1/4 1 3/8	inch		 \$0.35 \$40
11/2	inch		

PLATED SHAFT TIPS.



No. 3825.

Sizes.	Net price per pair	
1/8 inch	X C Plate\$0.03	5
	X C Plate	6
	X C Plate	
	X C Plate	
	Nickel Plate	
	Nickel Plate	
	Nickel Plate	-
11/4 inch	Nickel Plate	5

NICKEL PLATED NECK YOKE TIPS.



Sizes	. 3830.	Net price per pair.
7/8		\$0.45
11/8		

NICKEL PLATED WHIFFLETREE TIPS.



No. 90.

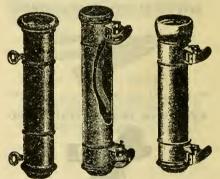
Sizes.				per pair.
7/8	inch	 	 	\$0.25
1				
11/9	inch	 	 	35

BUGGY NECK YOKE LEATHERS.



Sizes.					Net	price	each.
	134	and	2	inch	 		\$0.25

WHIP SOCKETS.



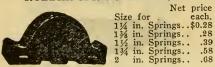
No. 10, for No. 15, for No. 18. Wood Dash. Leather Dash.



0.	221/2	Slei	igh	Soci	ket.	1	No. 64		
ize	s.					Net	price	per	doz.
0.	10.	For	W	ood	Dash				\$0.65

No.	10.	For	Wood	Dash				 . ;	60.00
No.	15.	For	Leather	Dash					.75
No	18	Black	, with	Band	Faste	enei	٠.,		1.25
No	221/	Sle	igh Soc	ket					1.50
No.	64	With	Band	Fastene	r				1.00

RUBBER SPRING BUMPERS.



THE VICTOR COIL BUFFER.



Net price each.

No. 1, For Spring 1½ to 1½ in......\$0.65
No. 2, For Spring 1½ to 2 in.......80
No. 3, For Spring 2 to 2½ in......1.10
Note.—Is a coil spring and is a pronounced success over the old style rubber buffer, as it is more durable, is more firmly attached, and rides easier, outlasting the spring itself.

FITCH'S SAFETY WHIFFLETREE PIN.



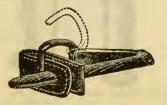
....\$0.25 Net price per doz. pair.....

EXCELSIOR TRACE ATTACHMENT.



Net price Per pr. Per doz. pr. ket.

FERNALD DOUBLE TRACE HOLDER.



PATENTED NOV. 15, 1904.

It releases the trace at a touch, yet when in use the trace cannot pull or work loose.

THOMAS TOP PROPS.



KNOB EYELETS.





Per doz. Sizes. No. 2\$0.05

Back. Net price Per gross \$0.25



LARGE KNOB EYELETS.

Net price per gross. No. 8, Harness Leather Centers\$0.65 Per doz\$0.08

RUBBER PROP BLOCKS.

Net price Sizes. Two foot pieces .. \$0.25



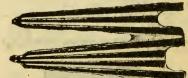
TOP PROP NUTS AND RIVETS.





Sizes. Net price per doz. Japanned Nuts\$0.10 Japanned Rivets

STEEL BOW SOCKETS.



3 Bow, 29 inch. \$0.55 4 Bow, 29 inch. 65 SINGLE SOCKETS FOR REPAIRING.

Net price each.\$0.15 Back Bows
Front Bows
Main Bows

CARRIAGE KNOBS.

1717

WROUGHT IRON CARRIAGE KNOBS.



BRASS GROMMETS AND WASHERS.





CANOPY TOP KNOBS AND EYELETS.



Fastener and Eyclet. Knob.

Sizes. Net price per gross.

Knobs and Eyelets \$1.75

Knobs only \$1.00

Eyelets only ...75

CURTAIN STRAP AND FASTENER.



WAGON CURTAIN PATCHES.



Sizes. Net price per doz.
No. 4, Complete with Staples......24c

ROLL UP STRAPS.



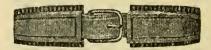
Sizes. Net price per pair.
No. 2, Patent Leather....4c

DOUBLE LOOPS AND BUCKLES.



Sizes. Net price per doz.
No. 7, Metal, Size of Loop 1/4x2 inches..20c
No. 1, Metal, Size of Loop 1/4x21/2 inches..24c

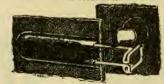
SINGLE LOOPS AND BUCKLES.



Sizes. Net price per doz.

No. 2, Metal, Size of Loop 5/8x2 inches....25c

THE ADJUSTABLE CURTAIN FASTENER.



PERFECTION CURTAIN FASTENER.



No.		No.	3.	N				
Sizes.					Net	price	per	doz.
No. 1.	For	Back	Stay.					.45c
No. 3,	For	Fails,	Conc	ave :	Single	e		.45c
No. 4,	To	Rivet,	Singl	e Fla	at			.45c
No. 5,	For	Wood	$_{,}$ Do	uble	Curt	ain		.45c
Eyelets	for	Perfe	ction	Curt	ain F	astene	ers	7½c

Note.—Give number when ordering. Packed one dozen in a box.

PROP BLOCK WASHERS.





Flat Center. Sizes.

Raised Center. Net price per doz.



TOP PROP WASHERS.

SWEDES IRON TRIMMERS' TACKS.

TTTTTTT

One Dozen Papers in a Package.

Sizes.			Net price per	paper.
21/2	oz.	Half	Weight	4c
3	oz.	Half	Weight	4c
			Weight	
18	oz.	Half	Weight	8c

CAPPED HEAD JAPANNED LINING NAILS.

TTTTTTT

20 Papers in a Package.

Net price	Net price
4 oz5c	10 oz5c
6 oz5c	12 oz5c
8 oz5c	14 oz5c

SOLID HEAD JAPANNED LINING NAILS.

JAPANNED TUFTING NAILS.

Sizes.				Net price per paper.
Tapanned	22	line,	11/4	inch
Tapanned	22	line,	3/4	inch13c

CLOTH TUFTING NAILS.

Sizes. Net price per gross.

Green and Blue Cloth 22 line, \(\frac{1}{8}\)
inch 18c

Green and Blue Cloth 12 line, 14
oz. 18c

Whip Cord 22 line. 25c

SEAMING CORD.



Sizes. Net price per lb. 3 lbs. to ball......13c

TUFTING TWINE.

Sizes. Net price per ball.
One-half pound in ball......30c



JAPANNED TUFTING BUTTONS.



CLOTH TUFTING BUTTONS.



Sizes. Net price per gross.

Green or Blue Cloth.....18c

Whip Cord20c

CURTAIN LIGHTS.



		Allert Street			2007	
					Ne	t price
Size	S.				Each	Per doz.
No.	12,	1 1/4 x5	inches	inside.	.\$0.05	\$0.27
No.	15,	13/4x51/2	inches	inside.	05	.45
No.	7,	23/8×5	inches	inside.	12	1.10
		25/8x51/8		inside.		2.00
No.	14,	41/8×7				4.00
No.	18,	3x4x7	inches	inside,		
K	eyst	one shape			40	4.05

OVAL CURTAIN LIGHTS.



Net pricc Each Per doz. Sizes. No. 8, 2 x53/8 inches inside..\$0.12 No. 10, 23/8x45/8 inches inside.. .15 \$1.10 1.30

BUCKRAM.



Thirty Yards in a Piece. Net price per yard. Single-S-Plain finish, 40 in. wide.....\$0.14

CUSHION SPRINGS.



Cushion. Back. Cushion Springs\$0.20

CHASE CARRIAGE RUBBER.

The very best.



SIZ							price			
22	0z.,	White	Back,	50	incl	ies	wide.			\$0.40
22	oz.,	Blue	Back,	50	inch	es	wide.			.50
22	0Z.,	Green	Back,	50	incl	ies	wide.			.56
1	Vote.	-We	carry	01	ily	the	best	(ar	riage
Ru	bber	made.								

BUGGY APRON.



Sizes. Net price each.

PATENT DASH LEATHER.

				Net	price	per	sq.	foot.
Best	Quality	only,	full	hides				\$0.17
Best	Quality	only,	cut					.20

NEW SPRING CUSHION ATTACHMENT



This consists of a steel band % in. wide with grooves into which 3 springs are firmly inserted so they may not easily be detached. A set consists of 5 bands, each having 3 springs. These are to be used in stuffing box cushions.

Net price each. Per strip of 3 springs.....\$0.06



THE NEW "I. D." THIRD SEAT.

Net price each.....\$0.85

It makes every buggy and sleigh you own as comfortable for three persons as two, either adult or child. By the use of this seat the third person occupies the same position (over the limbs of the other two), but all the weight and inconvenience are removed from the other occupants. It needs no fastening and fits any vehicle.

PREMIUM SPRING WHIFFLETREE HOOKS.



0.				Mer	price
Size				per	pair.
No.	1,	Size	7/8	in.	\$0.19
No.	2,	Size	1	in.	.19
No.	3,	Size	11/8	in.	.22
		Size			
No.	5,	Size	13/8	in.	.28

COIL AXLE WASHERS.



Size	s.				N	et	price	per	100.
7/8	inch	Nut	and	Collar,	100	in	Box.		.15c
1	inch	Nut	and	Collar,	100	in	Box.		.17c
11/8	inch	Nut	and	Collar,	100	in	Box.		.20c
11/4	inch	Nut	and	Collar,	100	in	Box.		.23c

SOLID SOLE LEATHER AXLE

WASHERS.



Packed in Boxes of 8 Set.

	Net price		Net price
Sizes.	per set.		per set.
₹ inch	Axle3½c		Axle5c
	Axle4c		Axle6c
11/8 inch	Axle4½c	1½ inch	Axle7c

BUGGY-BOOT SPRING.

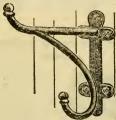
- The state of the

and down in buggy box, so as to extend them about 1 inch when boot is closed.

By far the best device for the purpose.

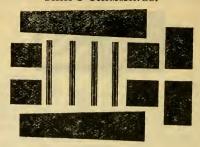
CANOPY TOP HOOKS. Cupped Hook. No. No. 2. Net price per gross.

HARNESS HOOKS.



No. 6. Net price each Top hook 101/2 inches, lower hook 4 inches.

SHAFT TRIMMINGS.



Net price per set......60c Set consists of 2 pieces patent leather 31/2x51/2x36 in.; 2 pieces 4x6 in.; 2 pieces 5x6 in, and 6 harness leather straps.

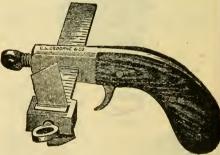
SHAFT STRAPS ONLY.

Net price per set. Sizes Set of 2 pieces, 8, 10 and 12 in. long.....12c 12 in. Straps separate.... Net price each 21/2 c

SHAFT LEATHERS ONLY.

Sizes. Net price each. Point pieces, 31/2 x51/2 x36 in.....20c Point pieces, 4 x6 x36 in...........21c

DRAW GAUGES.



Sizes. Net price each. No. 521/2, Draw Gauges, Iron Frame...\$1.35

CORNER MANGER.



With Guard.

Size, 17x17x10 in...... Net price each, \$1.00

TUFTING NEEDLES.

No. 97. Net price each. 6 to 14 inches\$0.10

No. 97½. Net price each. Sizes.

CAP KNIVES.



No. 79.

Net price each Round handles\$0.20



No. 80.

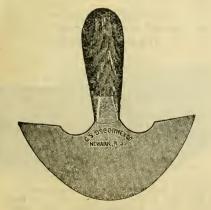


No. 76.

Net price each.

Square Point Roll handle.....\$0.20

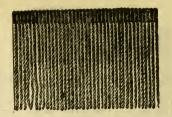
SADDLER'S KNIFE.



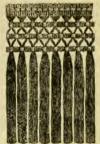
No. 70.

Net price eacch. Oval Handles, 6 inch.....\$1,20 nished.

CARRIAGE FRINGES.



No. 127.



No. 6000.

Net price per yard.

TRIMMERS' SHEARS.



Net price each. Sizes. Japanned Handle, Bent Shears, 81/2 in. long 1.25

WAGON, TRUCK AND BUGGY UMBRELLAS.



Sizes.				t price	
36 inch	Heavy	Drill-Wh	ite		\$1.35
38 inch	Heavy	Drill-Wh	ite		1.50
40 inch	Heavy	Drill-Wh	ite		. 1.65
Best Q	uality.	Heavy st	eel ribš	and fix	tures.
Handles	11/4 inc	h White	Ash, oil	ed and	l var-

BUGGY DASHES.



Sizes.	Net price each	Sizes.	Net price each.
18x11	inch\$0.78		inch\$1.03
19x11	inch	25x13	inch 1.07
20x11	inch86		inch 1.10
21x11	inch88		inch 1.13
22x11	inch99	28x13	inch 1.16
23x11	inch95	29x13	inch 1.20
24x11	inch9		inch 1.23
25x11	inch9"	7 32x13	inch 1.27
26x11	inch99		inch 1.33
27x11	inch 1.0		inch 1.44
28x11	inch 1.03		inch 1.07
29x11	inch 1.0		inch 1.10
30x11	inch 1.09		inch 1.14
31x11	inch 1.13		inch 1.18
32x11	inch 1.13		inch 1.20
33x11	inch 1.1		inch 1.25
34x11	inch 1.1		inch 1.28
35x11	inch 1.2		inch 1.30
36x11	inch 1.2		inch 1.33
38x11	inch 1.3		inch 1.40
40x11	inch 1.3		inch 1.45
22x13	inch		inch 1.50
23x13	inch 1.0	0	

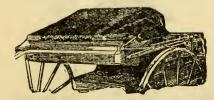
SURREY DASHES.



25x16 26x16 27x16	Net price each. inch\$1.40 inch 1.44 inch 1.48	29x16 30x16 32x16	inch\$1.55
28x16	inch 1.52	SARIO	men 2.00

Note-These Dashes are No. 1. Not Seconds.

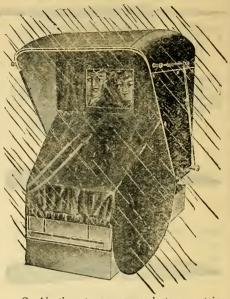
ADJUSTABLE DUST HOOD.



To Keep Mud and Dust Out of Top.

Net price each. Sizes in stock. 20-oz. Rubber, Adjustable.....\$1.00 Saves Top linings at a small cost.

WARNER STORM PROTECTOR.



Combination storm apron and storm curtain. Adjustable, fastened by hooks to dash and bow. Being fastened inside top it is impossible for rain to leak in. Look-out light is brought close to occupants inside top, thus protected from rain or snow.

Cut above shows storm front in actual use. Makes a closed carriage.

After the storm is over, upper part may be lowered and rolled out of way, making a fine

storm apron.

The front is very well made out of good

materials and is a ready seller.

It can be put on and taken off while sitting in the buggy, and in quicker time than any other device for this purpose.

Sizes.

Net price each.

RUBBER MATTING.

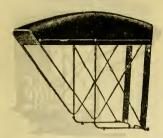


Net price per lineal foot, 36 inches wide,

3.32 inch thick. \$0.25 For floors, hallways, aisles, steps, stairs, floors of carriages, etc. Will outwear all other floor coverings and is easily cleaned. Deadens noise, prevents slipping, soft and yielding to the step, is neat and ornamental.

BUGGY TOPS.

Shipped from factory.



REGULAR THREE BOW TOP.

The following tops have steel sockets, three or four-bowed. Metal loops in back stays. Corded front and black valance. Wrought iron adjustable rail and joints, nicely japanned. Unlined back curtain. Head lining corded.

DRILL TOP.

No. 35. This top is made of leather finished enamel drill throughout. It is lined with cotton cloth. Back and side curtains are colorback drill.

20-oz. RUBBER TOPS.

No. 37. Is made of 20-oz. rubber, of good quality, and is lined with either Union or cotton cloth. Side curtains and back curtain are color-back 20-oz. rubber.

22-oz. RUBBER TOP.

No. 41. Twenty-two oz. rubber is used in this top throughout. Top is lined with Union cloth throughout, except side and back curtains, which are color-back rubber.....\$7.25

26-oz. RUBBER TOPS.

SPLIT LEATHER QUARTER TOP.

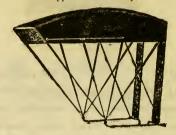
M. B. LEATHER QUARTER TOP.

No. 61. Made of machine buffed leather in the side quarters and back stays; 20 oz. rubber roof and curtains. Back curtain lined. Top lined with Union cloth.........\$10.25

Tops Without Rail 25c Less. TOPS ARE MADE TO ORDER. Directions for Measurements, Page 125.

BUGGY TOPS.

Shipped from factory.



REGULAR FOUR BOW TOP.

FULL SPLIT LEATHER TOP.

The following are regular custom made tops. Lined throughout with 8-oz. all wool lining, excepting the side curtains, which are made of color-back rubber; steel bow-sockets three or four bow; adjustable wrought iron rail and joints; adjustable patent fasteners in back stays; back stays padded with wadding, and lining blinds stitched; dust lining in side quarters; hand stitched front and back valance.

These tops we guarantee to be first-class in every respect.

No. 6. This is a split leather quarter top made of No. 1 split leather, with 30-oz. rubber duck roof; back curtains and side curtains lined with 8-oz. all wool cloth.......\$14.75

No. 7. Is a full leather top, made of No. 1 split leather throughout, except the side curtains, which are made of 30-oz. rubber duck; top lined with all wool 8-oz. cloth.....\$18.75

No. 8. A leather quarter top, made of No. 1 machine buffed leather; with 30-oz. rubber duck roof, back and side curtains; top lined with 10-oz. all wool cloth.............\$17.50

No. 9. Is a full leather top, made of No. 1 machine buffed leather throughout, except side curtains, which are made of 30-oz. rubber duck; top lined with 10-oz, all wool cloth.....\$25.50

(Continued Next Page.)

Tops Without Rail 30c Less.

TOPS ARE MADE TO ORDER.

Directions for Measurements, Page 125. Price F. O. B. factory.

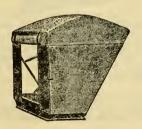
BUGGY TOPS.

Shipped from factory.

IMITATION LEATHER TOP.

WHITE DUCK TOP.

SPECIAL ACME TOP.



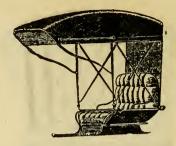
Detachable side curtains. Back curtain rolls up. Covered with White Sail Duck or Colored Blue or Brown and in sizes to fit seats from 40 to 48 inches out to out on Top.

Net price each\$4.40

Send length seat, out to out on top.

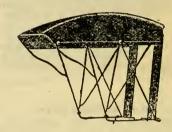
BUGGY TOPS.

Shipped from factory.



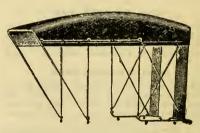
THREE-BOW HANDY.

25 Cents Extra For This Style Above Regular Prices.



FOUR-BOW HANDY.

25 Cents Extra for This Style Above Regular Prices.



EXTENSION TOPS.

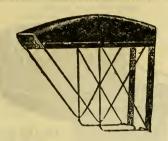
Sizes.	Net price each.
No. 10,	Leather-finished drill lining\$ 9.50
No. 11,	20-oz. rubber, Union lining 12.00
	24-oz. rubber, Union lining 12,25
	30-oz. rubber, Union lining 12.75
	Split leather, Union lining 15.25
No. 15, Unior	Machine buffed leather quarter, lining 19.50

Tops Without Rail 30c Less.

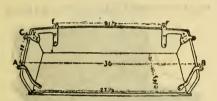
TOPS ARE MADE TO ORDER.

Directions for measurements, Page 125. Prices F. O. B. factory.

BUGGY TOPS.



HOW TO MEASURE FOR BUGGY TOPS



All Tops Three-bow and Green Lining unless otherwise ordered.

For Top give exact measure from A to B. For Full Back give exact measure from A to B and E to F.

For Cushion give exact length and width on bottom.

For Fall give exact width of body.

PHAETON.

Give distance across goose-neck where bows are attached.

Give distance from center of goose-necks to bottom of seat.

Give distance from goose-neck to back prop iron.

Give width of back panel.

EXTENSION TOP.

For Spring Wagons give width of seat, distance from front of front seat to front of back seat. If ironed, give distance between goosenecks of front and back seat. Give difference in height, if any.

For Surrey, give the same dimensions as for Phaetons, also distance from goose-neck on rear seat to goose-neck on front seat, from front goose-neck to front of seat.

TOPS WITHOUT RAIL.

Give distance across goose-necks. Give width of rail at back corners.

Give distance from goose-neck to prop iron where joint is attached. (Tops requiring Bows over 42 inches wide, \$1.00 extra.) ROUND BUGGY UMBRELLA.



No. 1. Round, with Fringe and Standard. \$4.50 No. 3. Round, with Fringe and Standard. 3.75 No. 1—Colors Tan, Blue, Brown and Green. No. 3—Colors Tan only.

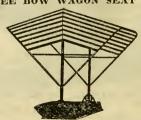
CANOPY. Shipped from factory.



Cover, Lining, and Fringe, same as used on English Canopies. Covers, Specially Woven Duck, Light Color.

Price. Price. \$ 9.50 \$12.25 44x48 48x60 12.25 9.50 48x64 48x48 13.50 10.80 48x72 48x54 13.50 10.80 54x7654x54 14.50 12.25 54x80 60x60

THREE BOW WAGON SEAT TOPS.



With All Irons Ready to Attach to Seat. Net price each.

Covered with Blue and White Striped Duck Note.—Regular Sizes, 34, 36, 38, 40, 42, 44 and 46 inch.

Send measure of Seat from Out to Out on Top.

COMMON CUSHIONS.

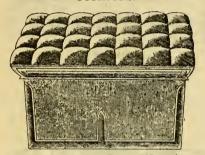
Shipped from factory.



36 INCHES AND UNDER.

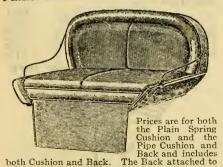
No	With
Sizes. Fall.	Fall.
No. 20, Enamel Muslin\$0.55	\$0.65
No. 21, Drill	.80
No. 23, 22-ounce rubber75	.90
No. 24, White Duck90	1.05
Cushions over 36x14 Extra.	

CUSHIONS.



	Net price	each.
	With	No
Sizes.	Springs. Springs.	
No. 72,	14-oz. All Wool Cloth\$3.25	\$2.75
No. 71,		2.10
No. 75.	Split Leather 3.25	2.80
No. 77.	M. B. Leather 4.50	4.00
	Imitation Leather 1.75	1.35

Cushions over 28x15 inches, Extra. PLAIN SPRING CUSHION AND BACK.



solid panel.
Sizes. Net price per set.

 Sizes.
 Net price per set.

 Pipe.
 Plain.

 No. 26, No. 38, 16-oz, Cloth, Moss Top.. \$6.70

 No. 27, No. 39, 14-oz, Cloth, Moss Top.. 6.40

 No. 28, No. 40, 12-oz, Cloth, Moss Top.. 5.90

 No. 29, No. 41, Split Leather, Moss Top. 8.10

 No. 30, No. 42, M. B. Leather, Moss Top. 11.00

 Cushions over 28 in. Long, Extra.

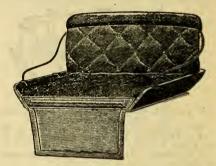
If the Wood Panel or Sidearm Rails are Not Wanted, Deduct 50c.

PIPE SPRING BACK AND CUSHIONS.

Shipped from factory.



PLAIN TUFTED BACK AND CUSHION.



28 INCHES AND UNDER.

FULL BACKS.



Note.—All Cushions are made to order.
Price F. O. B. Factory.

PIANO BOX BODIES.

Shipped from Factory.



No. 1, PIANO BOX BODY.

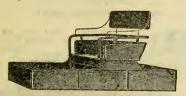


No. 3, PIANO BOX BODY.

No. 3, Piano Box Body, Swell Sides, Convex Body Panels, Concave Risers, O. G. Seat, regular length 54 inches........\$5.00



No. 5, PIANO BOX BODY.



No. 6, PIANO BOX BODY.

Note.—Seats Ironed for Shifting Rail. Regular length 54 inches, width 24 inches or under.

Note.—Bodies and Seats are shipped direct from the factory.

PIANO BOX BODIES.

Shipped from Factory.



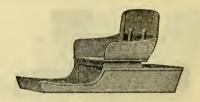
No. 7, PARK WAGON.

No. 7, Park Wagon, with two Phaeton Seats, Sizes of Body 25x66 inches....\$9.00 No. 8, Same with Two Buggy Seats, Panel Backs Attached, Size of Body 25x66 in. 8.00



No. 15, CORNING BODY.

No. 15, Corning Body, Straight Riser High Arms, Two Lines Moulding, Convex Seat, Regular Size 23x50 inches...\$6.00



No. 16, WHITECHAPEL BODY.

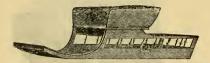
No. 16, Whitechapel Body, Phaeton Seat, Concave Risers, Two Lines Moulding, Regular Size 29x54 inches.........\$6.75



No. 17, CONCORD BODY.

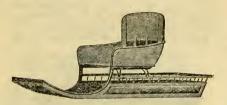
Note.—Bodies and Seats are shipped direct from factory.

ROAD WAGON BODY. Shipped from Factory.



No. 18, SPINDLE ROAD WAGON.

No. 18, Spindle Road Wagon, with High Arm Seat, Size 24x55 inches.......\$5.25



No. 19, SPINDLE ROAD WAGON.

No. 19, Spindle Road Wagon with Phaeton Seat, Size 23x59 inches. \$7.00 No. 20, Same with Spindle Seat. 7.50 No. 21, Same with Buggy Seat. 7.00



No. 25, CUTUNDER PIANO BOX BODY.



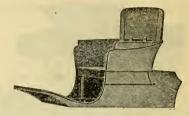
No. 27, CUTUNDER PIANO BOX BODY.

STANHOPE BODY.
Shipped from Factory.



No. 30, STRAIGHT SILL STANHOPE BODY.

Net price each.
No. 30, Straight Sill Stanhope Body,
with Phaeton Seat, Size 23x52 inches..\$8.00



No. 31, STRAIGHT SILL STANHOPE BODY.

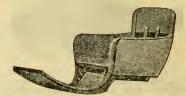
No. 31, Straight Sill Stanhope Body, with Panel Scat, Size 27x51 inches..\$9.50

PHAETONS.



No. 46, PHAETON BODY.

No. 46, Phaeton Body, Size 29½x7½ inches\$11.00

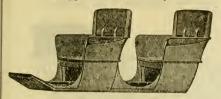


No. 47, PHAETON BODY.

No. 47, Phaeton, Size 29½x47½ inches. \$9.00 Note.—Bodies and Seats are shipped direct from the factory.

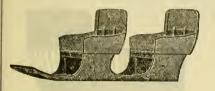
Price F. O. B. Factory.

SURREYS. Shipped from Factory



No. 56, STRAIGHT SILL SURREY BODY.

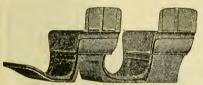
No. 56, Straight Sill Surrey Body, size 27x70 inches\$\\$12.50\$



No. 57, STRAIGHT SILL SURREY BODY.

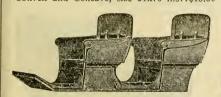
No. 57. Straight Sill Surrey Body, three-

No. 57, Straight Sill Surrey Body, threequarter size 25x27 inches\$10.00



No. 59, STRAIGHT SILL SURREY BODY.

No. 59, Straight Sill Surrey Body, Seats
Convex and Concave, size 21x70 ins..\$13,50



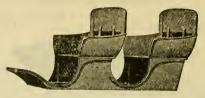
No. 60, STRAIGHT SILL SURREY BODY.

No. 60, Straight Sill Surrey Body, size 27x70 inches\$13.50

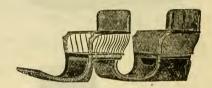
Note.—Bodies and Seats are shipped from factory.

Price F. O. B. Factory.

SURREYS. Shipped from Factory.

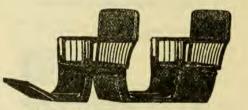


No. 61, STRAIGHT SILL SURREY BODY.



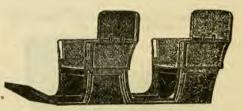
No. 76, CUTUNDER SURREY BODY.

Net price each.
No. 76, Cutunder Surrey Body, threequarter size 25x67 inches\$15.50
With Both Panel Scats............15.00



No. 166, SURREY.

No. 166, Surrey Cutunder, Both Seats
Spindle with Metal Handle.......\$16.50



No. 168, SURREY.

No. 168, Surrey, Straight Sill, Panel Seats with Metal Handles...........\$12.50 Note.—Bodies and Seats are shipped direct from the factory.

SEATS.

Shipped from Factory.

Buggy Seats Not Ironed\$1.38



No. X, BUGGY SEATS.

No. X Seat, Ironed for Shifting Rails....\$1.70

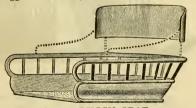


No. XX, BUGGY SEATS.

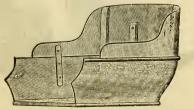
No. XX Seat, Ironed for Shifting Rails with Handles\$1.75



No. 1, BENT SPINDLE SEATS.



No. 45, BUGGY SEAT.

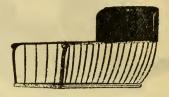


No. 28-O. G., AUTO SEAT.

								each.
Buggy	Size							.\$4.75
Surrey	Size							. 5.50
Note.	-Boo	lies	and	Seats	are	shi	pped	from
the fac	ctory.							

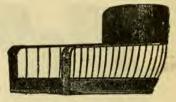
SEATS.

Shipped from Factory.



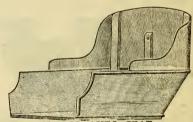
No. 2, BENT SPINDLE SEAT.

Net price each No. 2 Seat, Metal Post Braces Curved Wood Posts, for Buggies or Surreys....\$4.0



No. 3, BAND SPINDLE SEAT.

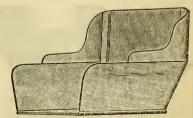
Net price each No. 3 Seat, for Buggies or Surreys.....\$4.5



No. 5M. AUTO SEAT.

 Buggy
 Size
 \$5.5

 Surrey
 Size
 6.0



No. 1. AUTO SEAT.

With Top and Lower Back each in one piece. Solid Bent Corners. Buggy size. \$6.5 Note.—Bodies and Seats are shipped fror the factory.

GEARS IN THE WHITE. Shipment from factory.

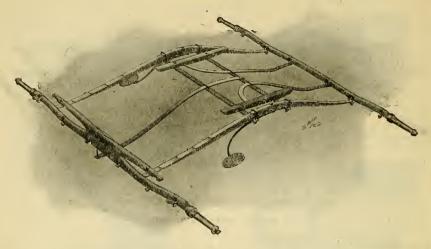


No. 04-ELLIPTIC BUGGY GEAR.

No. 0110-ELLIPTIC BUGGY GEAR.

Net price e	acn								
Axles-L.	D. $\frac{15}{16}$ x 6 $\frac{1}{2}$	fan tail s	wedged,	with p	oint c	entre a	axle c	lips and	beds
cemen	ted to ax	les.							
Springs-4	-leaf oper	n head wit	h wood s	spring	bars.				
Fifth Whe	el-Wilco	x 12-inch	Brewster	slot v	vith be	ent hic	kory	reaches,	mor-
tised i	n head bl	ock and in	oned full	lengt	h.				

Shipment from factory.



No. 05-BON TON GEAR.

Net price each\$9.	25
Axles-Double Collar 15x61/2 fan tail, swedged with point centre axle clips	
and beds cemented to axles.	
Springs —Genuine Bon Ton, which is recognized as being the most satisfactory side spring made.	
Note—Will take bodies from 24x54 to 25x56. Furnished with L. D. axles if	25

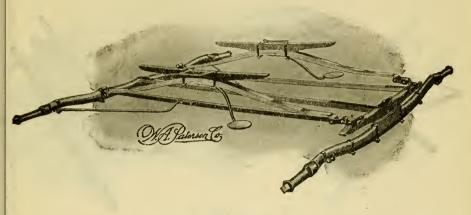
uesiteu, extra
No. 056—SOUTHERN SIDE SPRING GEAR.
Net price each\$7.5
Axles—Double Collar 15x61/2 rear axle coached.
Springs —Side springs with rear braces from outside of springs to rear axle instead of inside.
Note—This gear has no reaches, will take body 24x54.

No. 045—DOUBLE REACH SIDE SPRING GEAR.
Net price each\$8.00
Axles—Double Collar 18x61/2 fan tail and swedged.
Springs—Side springs hung on loose shackles, front and rear.
Fifth Wheel—Full bearing 12-inch with double reaches, iron full length.

Note-Will take body 24x54.

All Gears are shipped direct from the factory.

Shipment from factory.

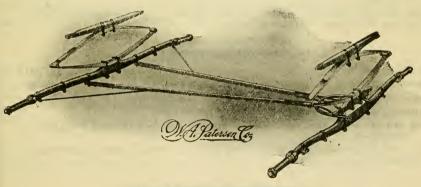


No. 057-CONCORD GEAR.

Springs-1% inches 4-leaf, 521/2 inches long.

Fifth Wheel-Face plate or 12 inch circle.

Note-Will furnish with L. D. axles and equalizers if desired, extra...... 1.00



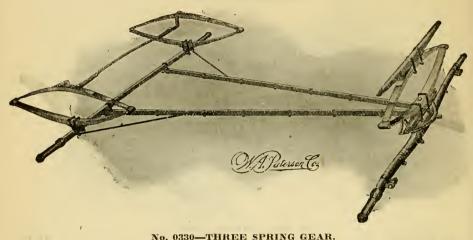
No. 0291-SURREY GEAR.

elips.

Springs—1%x4 and 5-leaf.

Fifth Wheel-Full bearing 12 inch, with reaches ironed full length.

Shipped from factory.



No. 0330—THREE SPRING GEAR.

Net price each

Capacity—800 lbs.
Axles—Double Collar 116x61/2 in.
Springs-1% in., with carrying capacity of 800 lbs.
Fifth Wheel—Short turn, with double reaches mortised in head block and well ironed.
Note—Furnished regular for body 34 in. by 84 in. Will furnish triple front spring if desired, extra
No. 0340—THREE SPRING GEAR.
211 50
Net price each\$11.50
Capacity—1200 lbs.
Capacity—1200 lbs.
Capacity—1200 lbs. Axles—Double Collar, 1\%x6\% in.

No. 02121/2-THREE SPRING GEAR.

spring if desired, extra.....

Net price ea	ach	 	• • • • • • • • • • • • • • • • • • • •	\$16.25
Capacity-1,	500 lbs.			

1.50

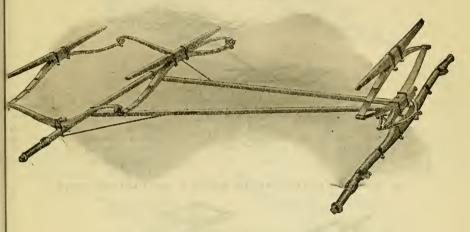
Axles-Double Collar, 11/4 x61/2 in.

Springs-11/2 in., with carrying capacity of 1,500 lbs.

Fifth Wheel—Heavy short turn, with double reaches mortised in head block and heavily ironed.

All Gears are shipped direct from the factory.

Shipment from factory.



No. 0335-HALF-PLATFORM GEAR.

Net price each
Capacity—800 lbs.
Axles—Double Collar, 1½x6½ in.
Springs-1% in., with carrying capacity of 800 lbs.
Fifth Wheel-Short turn, with double reaches mortised in head block and
well ironed.
Note—Furnished regular for body 34 in. by 84 in. Will furnish triple front
spring if desired, extra
N- 0945 HAVE DIATEODM CEAD

No. 0345—HALF-PLATFORM GEAR.

Net price each	\$13.45
Capacity—1,200 lbs.	
Axles—Double Collar, 1%x6½ in.	
Springs-1% in., with carrying capacity of 1,200 lbs.	
Fifth Wheel-Short turn, with double reaches mortised in head block and	
well ironed.	

Note-Furnished regular for body 34 in. by 84 in. Will furnish triple front	
spring if desired extra	1.50

No 0212-HALE-PLATFORM GEAR.

NO. VALA—ITALII- I MATI VICTA GENTA
217 15
Net price each\$17.15
Capacity—1,500 lbs.
Axles—Double Collar, 14x6½ in.
Springs-1½ in., with carrying capacity of 1,500 lbs.
Fifth Wheel-Heavy short turn, with double reaches mortised in head block
and heavily ironed.
Note-Furnished regularly for body 38 in. by 108 in. Will furnish triple

All Gears are shipped direct from the factory.

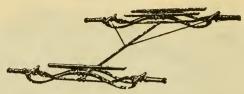
. 1.50

Prices F. O. B. Factory.

front spring if desired, extra

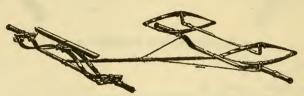
No. 24-IMPROVED SINGER DUPLEX GEAR.

Shipped from factory.



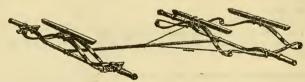
No.	Axle.	Springs.	Capacity.	f. o. b. factory.
1	1 x6½ in.	11/4 x 42 x 3 and 4	800 lbs.	\$ 9.22
2	11/8 x7 in.	11/4 x 42 x 4 and 5	1,000 lbs.	9.90
3	11/4 x7 in.	11/2x42x4 and 5	1,200 to 1,500 lbs.	11.82
4	13/8 x 7 1/2 in.	11/2x42x5 and 6	1,700 to 1,800 lbs.	14.85
5	1½x8 in.	13/4x40x5 and 6	2,200 to 2,500 lbs.	18.70

No. 25-COMBINATION SINGER DUPLEX AND ELLIPTIC GEAR.



No.	Axle.		Front Spring.	Hind Sp	ring.		f. o. b. factory.
1	1 x6½	in.	11/4 x42 x3	11/4x36x4	Light.	800 lbs.	\$10.20
2	1½x7	in.	1 1/4 x42x4	11/4x36x4	Heavy.	1,000 lbs.	11.05
3	11/4×7	in.	1½x42x4	1½x36x4	Heavy.	1,500 lbs.	13.31
4	13/8x71/2	in.	1½x42x5	1½x36x5	Heavy.	1,800 lbs.	16.42
5	1½x8	in.	$1\frac{3}{4}x40x5$	1½x36x5	Heavy.	2,200 to 2,500 lb	bs. 19.26

No. 26-COMBINATION SINGER DUPLEX AND PLATFORM GEAR.



No.	Axle.	Front Spring.	Side Spring.	Cross Spring.	Capacity.	Net price each f. o. b. factory.
1	1 x6½ in.	11/4 x3x42	11/2x4x36 Light.	1½x5x43	800 lbs.	\$12.75
2	11/8 x7 in.	11/4 x4x42	11/4 x4x36 Heavy.	1½x5x43	1,000 lbs.	13.25
3	11/4 x7 in.	1½x4x42	11/2x4x36 Heavy.	1½x6x43	1,500 lbs.	15.25
4	13%x7½ in.	1½x5x42	1½x5x36 Heavy.	1½x7x43	1,800 lbs.	18.50
5	1½x8 in.	13/4x5x40	13/4x5x36 Heavy.	13/4x7x43	2,000 to 2,50	0 lbs. 22.25
	Note.—When	ordering gears	please give track	and length an	d width of b	ody, that there

Note.—When ordering gears please give track and length and width of body, that ther may be no mistakes in filling orders.

SPRINGS FOR DUPLEX GEARS.

Sizes.	Net price each.	Sizes.	Net price each.
	in\$1.10	1 1/2 x4 leaf x42	in \$1.35
	in 1.30		in 1.60
11/4 x5 leaf x42	in 1.45	1 1/2 x6 leaf x42	in 1.85

No. 27-FITCH IMPROVED SHORT-TURN DUPLEX GEAR, Shipped from factory.



No.	Axle.	Springs.	Capacity.	f. o. b. factory.
1	1 x6½ in.	11/4 x42x3 and 4	800 lbs.	\$10.15
2	11/8 x7 in.	11/4 x 42 x 4 and 5	1,000 lbs.	11.00
3	1½x7 in.	1½x42x4 and 5	1,200 to 1,500 lbs.	13.75
4	13/8×7½ in.	1½x42x5 and 6	1,700 to 1,800 lbs.	17.05
5	1½x8 in.	13/x40x5 and 6	2,000 to 2,500 lbs.	20.90

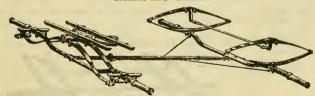
The main object in short-turn gears is that you can use a wider body and turn short. The bearing rests exactly over the center of the front and back axle, and the body fastens securely to the gear. The body does not have any sliding motion, either front or back, where there would be any chance for it to rattle or make a noise. In one-joint-reach we use a cone-shaped coupling, where it can be tightened, taking up all wear and making it noiseless.

No. 29—THE FITCH IMPROVED COMBINATION SHORT-TURN DUPLEX AND PLATFORM GEAR.



No. 1 2 3 4	Axle. 1 x6½ 1½x7 1½x7 1½x7 1½x7 1½x7½	in. in. in.	Front Spring. 1¼x3x42 1¼x4x42 1½x4x42 1½x5x42	Side Spring. 1,4x4x36 1,4x4x36 1,4x4x36 1,4x5x36 1,4x5x36	Cross Spring. 1½x5x43 1½x5x43 1½x5x43 1½x7x43 1½x7x43	Capacity. 800 lbs. 1,000 lbs. 1,500 lbs. 1,800 lbs. 2,200 to 2,500	Net price each f. o. b. factory. \$13.00 13.85 16.40 19.25 23.80
5	1½x8	in.	134x5x40	1 1/4 x 5 x 3 6	1 3/4 X 7 X 4 5	2,200 10 2,500	25.60

COMBINATION SHORT-TURN DUPLEX AND No. 28-FITCH IMPROVED ELLIPTIC GEAR.



					Net price each
No.	Axle.	Front Spring.	Hind Spring.	Capacity.	f. o. b. factory.
1	1 x6½ in.	1 1/4 x42x3	11/4 x36x4	800 lbs.	\$11.30
2	1½x7 in.	11/4 x42x4	11/4 x36x4	1.000 lbs.	12.05
9	1½x7 in.	1½x42x4	1½x36x4	1,200 to 1,500 lbs	. 15.30
4	13/8×7½ in.	1½x42x5	1½x36x5	1,800 to 2,000 lbs	18.10
5	1½x8 in.	13/x40x5	1½x36x6	2,200 to 2,500 lbs	

No. 32-THREE SPRING GEAR REGULAR.



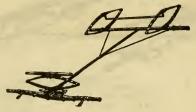
								Net	price ea	ich i. o. b.
No		Axle.		Front S	oring.	Hind St	oring.	Capaci	ty.	factory.
1		1 x6½	in.	11/2 x4x36		11/4 x4x36	Light.	800	lbs.	\$12.25
2		11/8×7	in.	1½x4x36		1½x4x36	Heavy.	1,000	lbs.	13.20
3		11/4 x7	in.	1½x5x36		1½x4x36	Heavy.	1,500	lbs.	15.30
4		13/8×71/2	in.	11/x6x36	Heavy.	1½x5x36	Heavy.	• 1,800		18.10
	3370	males the		aama aa al	in	+ for body la	one in fron	t and ha	ng hetv	ween hind

springs or for body to sit on top of springs, or for front wheels to turn under body. When wheels are to turn under body the gear is made for wheels one foot difference in height, but otherwise all for 4 in. difference in height of wheels.

All gears are shipped direct from the factory.

No. 33-THREE SPRING SHORT-TURN GEAR.

Shipped from factory



Hind Spring. 1¼x4x36 1¼x4x36 1½x4x36 1½x5x36	Capacity. f. o. b. fac 800 lbs. \$1 1,000 lbs. 1 1,500 lbs. 1	
	1¼ x4x36 1¼ x4x36 1½ x4x36	1½ x4x36 800 lbs. \$1 1½ x4x36 1,000 lbs. 1 1½ x4x36 1,500 lbs. 1

On this gear we use our Common Sense Short-Turn 5th Wheel, with the king bolt 5 in. back of center of axle, and is a good substantial short-turn 5th wheel. This gear is furnished for body to be hung on loop in front or to be set up on top of springs.

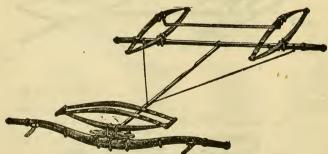
No. 42—COMBINATION SHORT-TURN END SPRING AND PLATFORM GEAR.



No.	Axle.	Front Spring.	Side Spring.	Cross Spring.		b. factory.
1	1 x6½ in.	1½x4x36	11/4 x4x36	1½x5x43	800 lbs.	\$14.50
2	11/8 x7 in.	1½x4x36	1 1/4 x 4 x 3 6	1½x5x43	1,000 lbs.	15.55
Ã	1½x7 in.	1½x5x36	1½x4x36	1½x6x43	1,500 lbs.	17.00
3	13/8×7½ in.	1½x6x36	1½x5x36	1½x7x43	1,800 lbs.	20.25
•	-/0/4	2/21101100	2/2	2/2	-,	

When ordering gears of this style please state whether the body is to be hung on loops in front or to set on top of front spring bar.

No. 38-DOUBLE ELLIPTIC THREE SPRING GEAR.



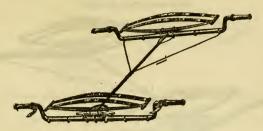
			Top Front	Bottom Front	Hind		Net price each
No.	Axle.		Spring.	Spring.	Spring.	Capacity.	f. o. b. factory.
1	1 x6½	in.	13/8×3	134x5x36	11/4 x4x36	800 lbs.	\$13.30
2	11/8×7	in.	1½x4	1½x6	1½x4x36	1,000 lbs.	14.40
3	1½x7	in.	1½x5	1½x7	1½x4x36	1,500 lbs.	17.00
4	13/8×71/2	in.	13/4×5	13/4×7	1½x5x36	1,800 lbs.	20.40
	mi ·		•		C 41 41	1:4: 6	this were on ony

There is no use in our going on and setting forth the good qualities of this gear, as any mechanic can see at a glance that it is better adapted for grocers' wagons where a toe board is to be used on body and still hang the body low, as the front spring is much lower than a regular elliptic. Spring bars furnished on front springs.

All gears are shipped direct from the factory.

No. 40-DOUBLE ELLIPTIC END SPRING DROP AXLE GEAR.

Shipped from factory.



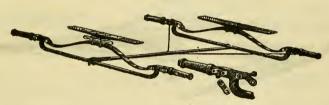
No.	Axle.	Top Front Springs.	Bottom Front Springs.	Capacity.	Net price each f. o. b. factory.
1	1 x6½ in.	13/8×3	13/8×5	800 lbs.	\$13.00
2	11/8 x7 in.	1½x4	1½x6	1,000 lbs.	14.70
3	11/4 x7 in.	1½x5	1½x7	1,500 lbs.	17.00

Hind Springs, same as front, but heavier steel.

This gear is adapted for any wagon where the load is wished to be as low to the ground as possible. It makes a fine gear for Grocers' Wagons, Laundry or Milk Wagons. In fact, it is a fine job for any purpose. We can build this gear with our Common Sense Short Turn 5th Wheel, and it will cost no more than with Derby 5th Wheel.

Spring Bars furnished on this gear.

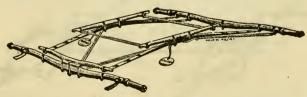
No. 30-F. A. BUSINESS GEAR.



No.	Axle.	Front Spring.	Hind Spring.		price each b. factory
1/2	%x6½ in.	11/4 x4x39	11/4 x5x39	500 lbs.	\$ 8.00
1	1 x6½ in.	1½x4x39	1½x5x39	800 lbs.	8.75
2	1½x7 in.	1½x5x39	1½x6x39	1,000 lbs.	9.60
3	1¼x7 in.	1½x6x39	1½x7x39	1,500 lbs.	11.60

This gear is made with our new improved cone hangers and spring loops; also cone reach and axle coupling which is perfect in its construction and perfectly noiseless. We make this gear in but two tracks, 4 ft. 8 in. and 5 ft.

No. 21-THE MOYER "BANNER" GEAR.



Net price each f. o. b. factory.

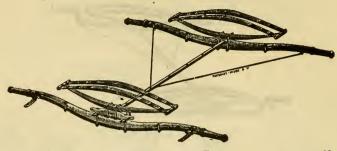
When ordering gears please give track and length and width of body, that there may be no mistakes in filling orders.

PLEASE TAKE NOTICE.

Note.—Owing to the number of different kinds of gears, different sizes, widths of body, etc., we are unable to carry these goods in stock, consequently make all shipments direct from the factory. All gears are shipped direct from the factory.

No. 39-DOUBLE ELLIPTIC END SPRING GEAR.

Shipped from factory.



No.	Axle.		Top Front Springs.	Bottom Front Springs.	Capacity.	Net price each f. o. b. factory.
1	1 x6½	in.	138 x3	13/8×5	800 lbs.	\$13.25
2	1½x7	in.	1½ x4	1½×6	1,000 lbs.	15.00
3	1¼x7	in.	1½ x5	1½×7	1,500 lbs.	17.30

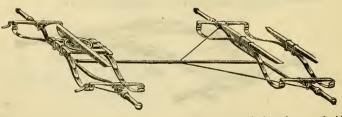
For ease and durability it has no equal. Suited for light pleasure surreys, traps or business wagon. It is made of first-class material and guaranteed to give satisfaction. We furnish spring bars on this gear.

No. 22-CONCORD GEAR.



				Net	price	each,	f. o. b.	factory.
No. 1	has 1/8	in.	Axle					\$11.25
			Axle					
No. 3 1	nas 11/8	in.	Axle			• • • • •		12.60
No. 4	has 1¼	ın.	Axle					15.80

THE EXCELSIOR GEAR.



This gear is designed for grocery and heavy market wagons; is low down and rides easy. When ordering gears please give track and length and width of body, that there may be no mistake in filling orders. All track measured out to out if not otherwise ordered.

						Capacity.	Net price each.
No 1	Ce	or has	11/8x7	in	axles	.1.000 lbs.	\$13.50
NT.	. C.	. 1	11/		axles	1 500 1be	15.60
INO. 2	Ge	ır nas	1 /4 X /	ın.	axies	7 000 4- 0 000 15	
No. 3	Ge	r has	13/8 x 7 ½	ın.	axles	.1,800 to 2,000 lb	
No. 4	Ge	r has	11/2 x8	in.	axles	.2,200 to 2,400 lbs	s. 21.90

All gears made 4 ft. 8 in. track unless otherwise specified.

No. 36-THREE SPRING DROP AXLE GEAR. Shipped from factory.



We make this gear as shown in cut with Cincinnati wrought 5th wheel and clip king bolt. We can furnish our new Common Sense Short-Turn 5th Wheel on the above gear when desired. We make this gear for four inches difference in height of wheels.

Net price each 1 gear has 1x61/2 axles, front springs 11/2x4x36 light, hind springs 11/4x4x36 Capacity, 800 lbs.....

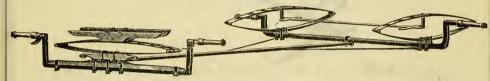
No. 2 gear has 11/4 x7 axles, front spring 11/2 x4 x36 heavy, hind springs 11/4 x4 x36 heavy.

No. 3 gear has 11/4 x7 axles, front spring 11/2 x5 x36 heavy, hind springs 11/2 x4 x36 heavy.

When ordering gears give track required, width and length of body to be used, so there may be no mistake in filling orders. We can only furnish these gears with half Pat. axles. We measure track out to out if not otherwise ordered.

All gears made 4 ft. 8 in. track unless otherwise specified.

No. 37-DOUBLE ELLIPTIC THREE SPRING DROP AXLE GEAR.



We make this gear as shown with Cincinnati wrought 5th wheel and clip king bolt, or with our new Common Sense Short-Turn 5th Wheel when desired. We make this gear for four inches difference in height of wheels.

Net price each

No. 41-COMBINATION DOUBLE ELLIPTIC AND PLATFORM GEAR.



When ordering gears please give track required; also length and width of body to be used on gear, so that there may be no mistake in filling orders. Track measured out to out if not otherwise ordered.

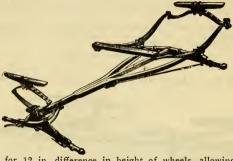
All gears made 4 ft. 8 in. track unless otherwise specified.

No. 43-ELLIPTIC AND HALF PLATFORM GEAR. Shipped from factory.



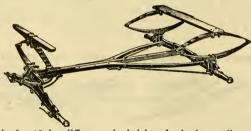
Short-Turn 5th Wheel. Gear is made for 4 in. difference in height of wheels.

No. 45—CONCORD EXPRESS ELLIPTIC AND HALF PLATFORM GEAR.



This gear is made for 12 in. difference in height of wheels, allowing front wheels to turn under body. Net price each

No. 44-THREE SPRING CONCORD EXPRESS GEAR.



This gear is made for 12 in, difference in height of wheels to allow front wheels to turn under body. Gear is made of best material and workmanship.

Net price each

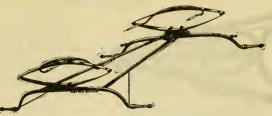
No. 0 gear, axles Concord, 11/4x7 spindle, regular springs, front springs 11/2x5x36, springs 11/2x4x34. Capacity, 1,000 pounds

No. 1 gear, axles Concord, 11/4x7 spindle, ribbed springs, front springs 11/2x6x36, .\$24.20

made for body longer than 9 feet.

No. 10-ROMAN BIKE GEAR.

Shipped from factory.



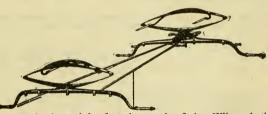
We make this Gear with round axles which have solid shaft lugs, or with swaged top and bottom axles, with Bradley Couplings, 5th wheel Twentieth Century, solid wrought iron, solid rear reach connections.

Net price each

Net price each

This gear is finished fine irons and axles hand drawn filed, and first class in every respect. Made for two inches difference in height of wheels.

No. 11-FITCH IMPROVED BIKE GEAR.



This Gear is to meet the demand for first class work. It has Wilcox Anti-Rattler 5th Wheel, solid wrought perch plates. We furnish Bradley Couplings on the above gear when desired. We also furnish the above gear with our Fitch Radical Springs. Made for bodies from 18 in. to 25 in. wide, and 48 in. to 56 in. long. Track 4 ft. 2 in., 4 ft. 4 in., and 4 ft. 6 in., 0. to O.

Net price each

No. 1 Gear, 13-16x/4x6 in., Fitch Improved Self-Oiling Axle. \$19.35 Springs, 11/4x4x36x61/4, open head, full bright graded steel.

Net price each

No. 14-END SPRING NAKED AXLE GEAR.

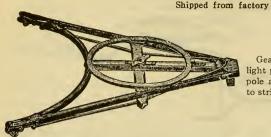


EITHER CROWN OR SLIGHT DROP.

This Gear is to supply a demand for fine, light work; 5th wheel Twentieth Century, all wrought iron, Bradley Shaft Couplings. Net price each

Net price each

SELLE'S PATENT TRUSSED PLATFORM GEARS



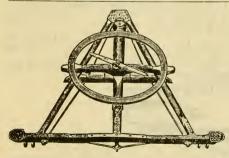
Gears Nos. 1 L to 4 H specially suited for light passenger and delivery wagons for drop pole and shafts only, and high front wheels to strike body in turning.

Nos. 1L to 4H

Low Circle Gear No.	Axles	Springs	Plain Circles	Front Plat- form only. No Springs or Axles	Gear, Springs and Axles, Clipped up with H. P. Con- Axles cord	Top Gear and Spring Bars	Drop Pole & Eveners Ironed Complete	Shafts Ironed com- plete
1 L 2 L 3 L 3 M 3 H 4 M 4 H	1 ½x7 1 ½x7 1 ½x7 1 ½x7 1 ½x7 1 ¾x7 1 ¾x7 ½ 1 ¾x7 ½ 1 ½x8	1 ¼x4&5x38&40 1 ¾x4&5x38&40 1 ½x4&5x38&40 1 ½x4&5x38&40 1 ½x5&6x40&42 1 ½x5&6x40&42 1 ¾x5&6x40&42 1 ¾x6&7x40&42	\$\frac{1}{6}\text{x}1\foralle{\pmax}{6}\text{x}20\$\$\$\$\frac{1}{6}\text{x}1\foralle{\pmax}{4}\text{x}22\$\$\$\$\frac{1}{6}\text{x}1\foralle{\pmax}{4}\text{x}24\$\$\$\$\frac{1}{6}\text{x}1\foralle{\pmax}{4}\text{x}24\$\$\$\$\frac{3}{6}\text{x}1\foralle{\pmax}{4}\text{x}24\$\$\$\frac{3}{6}\text{x}1\foralle{\pmax}{2}\text{x}24\$\$\$\frac{3}{6}\text{x}1\foralle{\pmax}{2}\text{x}24\$\$\$\$\frac{3}{6}\text{x}1\foralle{\pmax}{2}\text{x}26\$	\$3 75 3 75 3 75 4 20 4 60 4 60 5 25	\$20 00 21 50 21 75 21 75 24 60 24 60 26 55 29 50 31 75 30 60 32 85 35 60 37 80	\$2 70 3 15 3 40 3 60 4 05 4 05 4 50	\$7 90 8 15 8 20 8 45 8 75 8 75 9 00	\$4 50 4 50 5 10 5 65 5 65 6 20

Gears Nos. 5L to 7H specially suited for light passenger and delivery wagons for drop pole and shafts only. Circles raised to allow low front wheels to turn under body.

Raised Circle Gear No.	Axles	Springs	Plain Circles	Front Plat- form only. No Springs or Axles	Gear Springs and Axles, Clipped up with H. P. Con- Axles cord		Top Gear and Spring Bars	Drop Pole & Eveners Ironed Complete	Shafts Ironed com- plete
5 L 6 L 6 M 7 M 7 H	1½x7 1½x7 1¼x7 1¾x7 1¾x7 1½x8	1 3/4 x 4 & 5 x 3 8 & 40 1 1/2 x 4 & 5 x 3 8 & 40 1 1/2 x 5 & 6 x 40 & 42 1 3/4 x 5 & 6 x 40 & 42 1 3/4 x 6 & 7 x 40 & 42	56x1 14x24 56x1 14x24 38x1 14x26 38x1 12x28 76x1 12x28	\$4 85 5 20 5 25 6 10 6 70	\$21 85 22 50 25 65 31 75 37 15	\$23 65 24 10 27 70 35 00 39 40	\$4 95 4 95 5 40 6 30 6 75	\$8 15 8 20 8 45 8 75 9 00	\$4 50 4 50 5 10 5 65 6 20



Gears Nos. 15 M to 19 H gears are suitable for tinners' stove, hardware and general light business wagons—for drop pole or shafts with circles raised to allow front wheels to turn under body.

For stiff pole attachment on these gears add \$1.75.

Raised Circle Gear No.	Concord Axles	Springs, Oil Tem- pered, Plain or Ribbed	Plain Circles	Front Plat- form only. No Springs or Axles	Gear, Springs & Concord Axles Clipped Up	Top Gear and Spring Bar	Pole & Eveners Ironed Complete	Shafts Ironed Com- plete
15 M 16 M 17 M 18 L 18 M 19 M	1 ½x7 1 ¼x7 1 ¾x7 1 ¾x7½ 1 ½x8 1 ½x8 1 ½x8 1 ½x8	1 36x4&5x40&42 1 ½x5&6x40&42 1 34x5&6x40&42 2 x6&7x40&42 2 x7&8x40&42 2 ½x8&9x40&42	5x1 \(\frac{1}{4}\)x26 \(\frac{3}{6}\)x1 \(\frac{1}{4}\)x26 \(\frac{3}{6}\)x1 \(\frac{1}{2}\)x28 \(\frac{3}{6}\)x1 \(\frac{1}{2}\)x28 \(\frac{7}{6}\)x1 \(\frac{1}{2}\)x27 \(\frac{7}{6}\)x1 \(\frac{3}{4}\)x30	\$ 6 70 7 95 8 80 10 10 10 80 12 40	\$25 65 30 15 36 90 44 80 49 95 61 90	\$4 95 5 40 6 30 7 00 7 20 8 10	\$8 20 8 45 8 75 9 00 9 55 10 15	\$4 50 5 05 5 65 6 15 6 75 7 30

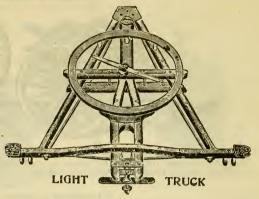
All gears on this page are shipped direct from factory at Akron, Ohio.

SELLE'S PATENT TRUSSED PLATFORM GEARS Shipped from factory

Nos. 30 L to 34 H for light truck wagons stiff pole, and low front wheels to turn under body, suitable for heavy delivery, light truck and transfer wagons.

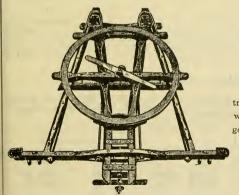
ORDER PLATFORM GEARS by number and letter, giving width of steel, length of side and cross springs.

In ordering platform gears clipped up, give full specifications as to width of steel, number of plates, length of side and cross springs, sizes of axles front and rear, length of spindle, width of track out to out, width of tire to be used height of front and rear wheels, sizes of spokes (front and rear), width and depth of rims, thickness of tire, width and length of body and whether it shall be hung level or sloping to the rear.



Raised Circle Gear No.	Concord Axles	Springs, Oil Tem- pered, Plain or Ribbed	Plain Circles	Front Plat- form only. No Springs or Axles	Concord	Top Gear and Spring Bar	Stiff Pole & Eveners Ironed Complete	Shafts Ironed Com- plete
31 M 31 H 32 M 32 H 33 M 34 H	1 3/8 x 7 1/2 1 1/2 x 8 1 5/8 x 8 1/2 1 3/4 x 9 1 3/4 x 9 2 x 10	1 3/4 x 5 x 6 x 40 x 42 1 3/4 x 6 x 7 x 40 x 42 2 x 7 x 8 x 40 x 42 2 x 8 x 9 x 40 x 42 2 1/4 x 8 x 9 x 40 x 42 2 1/2 x 10 x 11 x 40 x 42	78x1 ½x28 ½x1 ½x28 ½x1 ¾x28 ½x1 ¾x30	\$12 60 13 10 14 05 14 50 16 35 19 75	\$37 20 41 80 48 80 56 00 60 00 76 00	\$5 60 6 00 6 40 6 80 7 20 8 40	\$7 76 8 00 8 50 9 00 9 00 10 00	\$5 00 5 50 6 00 6 50 6 50 8 00

SELLE'S PATENT TRUSSED PLATFORM GIANT TRUCK GEAR



FOR MERCHANDISE TRUCKS, ETC.

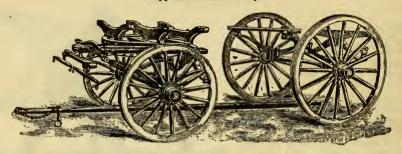
Nos. 40 L to 46 H, a serviceable gear for transfer trucks, ice, oil tank, sprinkling and beer rol wagons. We make ice, sprinkling and beer rol gears of selected white oak timber.

Raised Circle Gear No.	Concord Axles	Springs, Oil Tem- pered, Plain or Ribbed	Plain Circles	Front Plat- form only. No Springs or Axles	form only. Concord No Springs Axles		& Eveners Ironed Complete	Shafts Ironed Com- plete
41 L 42 L 42 H 42 H	1 5/8×8 ½ 1 3/4×9 2 ×10 2 ½×11	2 ½x 7& 8x40&42 2 ½x 8& 9x40&42 2 ½x10&11x40&42 3 x12&14x40&42	7 x1 3 x32 16 x1 3 x32	\$22 00 24 00 26 00 30 40	\$60 00 69 60 82 80 106 80	\$6 80 7 60 8 40 10 00	\$8 50 9 00 10 00 11 00	\$6 00 6 50 8 00 8 00

All gears on this page are shipped direct from factory at Akron, Ohio.

WAGON GEAR COMPLETE, READY FOR BODY

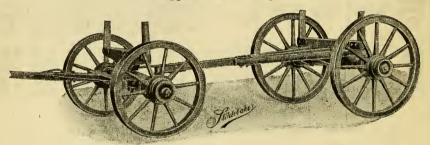
Shipped From Factory.



Can furnish with promptness, light and heavy Platform Gears as shown above complete ready to receive the body. In writing for prices, give full specifications, stating capacity and giving such description as will enable us to quote intelligently. We can save you money on this line.

FARMER'S HANDY TRUCK.

Shipped From Factory.



	**************************************	Net price each.
No. 8228.	Free on board cars at Factory	\$29.00 32.00
No 8996	Free on hoard cars at Factory	25.00
No. 8226.	Free on board cars at Corry, Pa	20.00

WIDE OR NARROW TRACK. CAST SKEINS ONLY.

Wide track, 5 feet; narrow track, 4 feet 6 inches, center to center of tires on the ground. Bolsters are 3 feet 6 inches on wide track; 3 feet 2 inches on narrow track, between standards. Price includes wood hub wheels and pole, no whiffletrees or neckyokes.

No.	Size of	Height o	of Wheels	a: 6 m:	Approximate			
	Cast Skein	Front	Hind	Size of Tire	Weight	Capacity		
8228 8226	3½ x10 in. 3 x10 in.	30 in. 30 in.	36 in. 36 in.	4 x3% inches 3½x3% inches	680 lbs. 560 lbs.	4000 lbs. 3000 lbs.		

This truck is especially adapted to farm or orchard work, but can be readily utilized for transfer work by adding a suitable platform. The reach is long enough to couple out for a 16-foot rack or box. The bolsters are made with wrought iron sockets and removable wood standards.

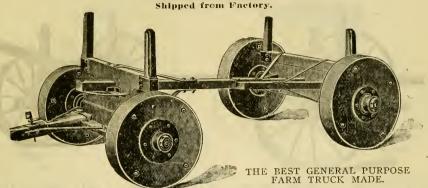
We furnish regularly with wood hub wheels, 30 inches and 36 inches high, but can also furnish with wheels 30 inches high all around, or 36 inches high all around. We believe the wood hub wheels to be stronger and of longer life than the steel wheels, but will if desired furnish steel wheels, either 28 inches, 30 inches or 36 inches high at the same price.

While this truck is built of good material and finished in a workmanlike manner, it must not be expected at the same price we sell it to stand up under the same hard usage that our regular wagons would. Neither does the same guarantee apply.

We will ship wood wheels unless otherwise specified.

No. 9-HANDY WAGON.

WOOD WHEELS, NAKED GEAR.



This is our latest, and we believe it to be the best general purpose 2-horse farm truck made. It, in connection with our platform, combines all the advantages which are sought in a farm

truck. Broad tire, 6 inches. "From every point of view the 6-inch tires will be the most Four-inch tires work down into the ruts made by the narrow tires and bind." satisfactory.

Professor Waters of Missouri Experiment Station.

Second. Short Turn—The front wheels turn under the load, allowing the wagon to be

Second. Short Turn—The front wheels turn under the load, allowing the wagon to be turned in its own length.

Third. The Fifth Wheel.—All our short turn styles are made with a very strong reach and an especially designed fifth wheel and large iron circle around it. This is a very important point, because when a loaded wagon is coming around a short turn, the strain on the fifth wheel is great if the ground is rough or the load not well balanced, and to meet this we have kept strengthening and bracing our trucks until there is nothing like it on any other wagon.

Fourth. Broad, Low Platform.—The platform can be any length or width without interfering with the turning of the wagon.

Fifth. Your ordinary wagon box can be used on this wagon the same as on any common wagon.

wagon. Sixth. Easy Draft because of its broad tires and low hitch, giving the horses a lifting advantage when pulling up into the barn.

No. 9 HANDY WAGON.

Two-horse, short-turn style; wheels turn under load. Standard Track—Narrow, 4 feet 8 inches; wide, 5 feet center to center of tires on ground. Bolsters, 38½ inches between stakes on narrow track; 42 inches on wide track. Prices include pole and wrench only.

Catalog No.	Kind of Wheels	H't Front Wheels	H'ght Rear Wheels	Size of Tires, in.	Size of Skein, in.	Size of Axle, in.	T'p of Bol. fr'm Gr'nd	Approxi- mate Weight	Approxi- mate Capacity.	Net price each.
101	Wood	24	28	6x1/4	3½x7	3x4½	26	750 lbs.	4,000 lbs.	\$27.00
102	Wood	26	30	6x 1/4 6x 1/4	3½x7	3x4½	28	800 lbs.	4,000 lbs.	28.00
103	Wood	28	32	6x1/4	31/2×7	3x4 1/2	30	850 lbs.	4,000 lbs.	29.00
104	Steel	26	30	$4 \times 3/4$	31/x7	$3x4\frac{1}{2}$	28	625 lbs.	4,000 lbs.	27.50
105	Steel	26	30	4 x 3/4 5 x 3/8	3½x7	3x4 ½	28	650 lbs.	4,000 lbs.	29.00
106	Steel	28	32	4x3/8	3½x7 3½x7	$3x4\frac{1}{2}$	30	650 lbs.	4,000 lbs.	28.00
107	Steel	28	32	$5x\frac{3}{8}$	3½x7	3x4 1/2	30	675 lbs.	4,000 lbs.	29.50
108	Steel	30	34	4x3/8	3½x7	3x4 1/2	32	675 lbs.	4,000 lbs.	28.50
109	Steel	30	34	5x3/8	3½x7	3x4½	32	700 lbs.	4,000 lbs.	30.00

Extra Capacity-For the wood-wheel styles, 5,000 pounds capacity, add \$2.00 to price; for

6,000 pounds capacity add \$7.00 to price.

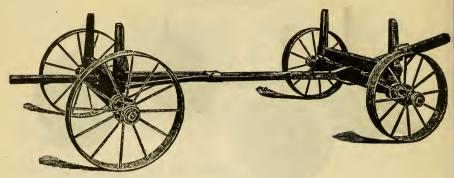
Thickness of Tires. Ten years' experience has demonstrated that tires 4-inch in thickness of the capacity or less. on our wood wheels are amply strong and durable for all wagons of 5,000 pounds capacity or less. However, we put on 1/3-inch tires at \$2.50 per wagon extra. 3/4-inch tires are always furnished on three-ton styles.

Prices F. O. B. Factory.

Note.-A catalogue illustrating other kinds will be mailed upon request.

DEALERS' HANDY WAGON.

Shipped from Factory.



OUR DEALERS' HANDY WAGON WITH 28 IN. FRONT, 30 IN. REAR WHEELS AND 4 x 3 % IN. PLAIN TIRE.

The above are considered the standard height wheels for a farm truck of this style and makes the top of bolsters 22 inches from the ground, though other heights as noted in the specifications.

Below we give complete specifications and wish to lay special stress on the following points: We use nothing but hickory and oak in the construction, the life of which is four or five times that of maple or other soft woods; rear hounds are angle steel with pressed steel hound plates, not merely braces as are being used on most of the cheap trucks; skeins on the standard truck are 3½x10 inches, full length bearing in hub; equipped with our best steel wheels; solid cast hub, which is stronger and better in every way than a light malleable hub; wagon is guaranteed to carry 4,000 pounds.

MATERIAL:-Axles, hickory; bolsters, tongue, etc., best oak, thoroughly seasoned.

STANDARDS:-14 inches high, set in pockets made of 3 inch iron.

REAR HOUNDS:—Made of 134 inch angle steel, and are bolted securely to the axles and bolsters. They are also bolted to the pressed steel hound plate, which has a bolt running through coupling pole, so that wagon can be lengthened or shortened as desired.

WHEELS:—Our best steel wheels with solid cast hub; oval staggered wrought steel spokes and wrought steel tires.

FINISH:—Wheel painted green; remainder of gear red and varnished, making a very neat appearance.

TRACK:—Wide, 5 feet. Narrow, 4 feet 8 inches, center to center of tire. Bolsters on wide track wagon, 3 feet 6 inches; narrow track, 3 feet 2 inches, between standards. We can change the distance between the standards to suit your customer's bed without extra charge, if specified in order.

31/4 x10 in. Skein.

Prices of Wagon with Plain Tire.

4000 lbs. Capacity.

Height of Wheels		Size of		PRICES OF DEALERS' HANDY WAGONS f. o. b. cars factory Dimensions are width and thickness of tire.							
Front Inches	Hind Inches	Inches	Cap	4x3/8	4x½	5x3	5x½	6x3/8	6x½		
28 30 32 34	30 32 34 36	3¼ x10 3¼ x10 3¼ x10 3¼ x10 3¼ x10	4000 lbs. 4000 lbs. 4000 lbs. 4000 lbs.	\$18.40 20.40 21.80 22.80	\$19.55 21.60 22.80 24.00	\$19.55 21.65 22.80 24.00	\$20.70 22.80 24.00 25.20	\$20.70 22.80 24.00 25.20	\$21.85 24.00 25.20 26.40		

EXTRAS:—Neckyoke, single and doubletrees, add \$1.75 to above prices. Brake, add \$3.00 to above prices.

PIANO BODY TOP BUGGY.

Shipped from factory.



No. D600.

Cloth Trimming and J-Seat.

	Net price each.
Drill Top	\$37.80
Full Rubber Top	39.00
Full Leather Top	42.60
Leather Quarter Top	40.20

Extras

	Net price each.
Leather Trimming over	Cloth\$1.00
Drill Trimming, deduct	1.00
Leather Trimming over	Drill 2.00
Spring Cushion on Dril	1 Trimmed Job25
Bailey Body Loops	

DESCRIPTION.

- BODY-17, 20, 22 or 24x54 inches. Concave seat risers. Body screwed, glued and plugged.
- GEAR—Oil-tempered, easy riding springs.
 15-16 inch Long Distance axles with Collinge
 Bell collars. ARCH OR DROP. Full
 plated reaches. Rear king bolt fifth wheel.
 Cemented axle caps.
- TRACK-Narrow (4 ft. 8 in.) or wide (5 ft. 2 in.)
- WHEELS—SELECTED HICKORY. Sarven patent, 34 or 78 inch, 36-40, 38-42 or 40-44. Full bolted, oval edge steel tires.
- PAINTING—Gear, green or red, neatly striped. Body, black, fancy decorated (plain black or neatly striped body if preferred.)
- UPHOLSTERING—Green or blue cloth, whipcord, moroccoline, or genuine trimming leather. Carpet.
- TOP—Three or four bows. Leather quarters, rubber drill roof, back curtain, back stays and side curtains; genuine full rubber top or full drill top. Cloth lined. Storm apron.

SHAFTS—Good quality. Nicely finished.

No. 600. With leather quarter top will have
spring cushion and padded seat ends.

PIANO BODY TOP BUGGY.

Shipped from factory.



No. C51.

Cloth Trimming, and J-Seat.

						Net	price	e each.
Full	Rubber	Top .			 			\$44.40
	Leather							
Leath	er Qua	rter T	op		 			45.60
	~		Ex	tras				

Net price each.
Genuine Leather Trimmings......\$2.00
Leather Back Curtain on Leather ½ Top. 1.25

DESCRIPTION.

- BODY—17, 20, 22 or 24x54 inches. High lazy back. Padded seat ends. Soft spring cushion. Concave seat risers. Swell panels. Body screwed, glued and plugged. Japanned seat handles. Metal edge boot.
- GEAR—Oil-tempered, easy riding springs.
 One-piece wrought iron Bailey body loops.
 15-16 inch Long Distance axles with Collinge
 Bell Collars. Arch or drop. Full plated
 reaches. Full circle, double plate rear king
 bolt fifth wheel. Cemented axle caps.
- WHEELS—SELECTED HICKORY. Sarven patent, 34 or 78 inch, 36-40, 38-42 or 40-44; 1 inch, 40-44. Full bolted, oval edge steel tires
- TRACK-Narrow (4 ft. 8 in.) or wide (5 ft. 2 in.)
- PAINTING—Gear, a fine shade of red or Brewster green, neatly striped. Body, plain black (striped or decorated if ordered.)
- UPHOLSTERING—Green or blue cloth, whipcord, or genuine trimming leather. Half length carpet. Carpeted side panels.
- TOP—Leather quarters with rubber roof and back curtain, rubber side curtains; full leather top with rubber side curtains, or genuine full rubber top. Cloth lined. Storm apron. Three or four bows. Full wrought shifting rail.

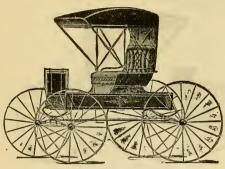
We will equip any of our vehicles with rubber tires at prices named below.

GUARANTEED SOLID RUBBER TIRES.

3/4	inch	36x40	and	38x42	 	 	\$13.20
3/4	inch	40x44 36x40 40x44	and	42x46	 	 	. 14.40
7/8	inch	36x40	and	38x42	 	 	. 15.60
7%	inch	40x44	and	42x46	 	 	. 16.80
1 0	inch	36x40	and	38x42	 	 	. 18.00
î	inch	40x44.			 	 	. 19.20
116	inch	40x44.			 	 	. 21.60
SI	hipped	from	the f	actory.			

FANCY TOP BUGGY.

Shipped from factory.



No. C50.

	Cloth	Trimn	nings,	and	J-8	Seat.	
_{{ }}		_				price	
	Rubber						
	Leather						
Leatl	ier Quai	ter To	р				48.30
-]	Extras				
					Net	price	each.

DESCRIPTION.

BODY—17, 20, 22 or 24x54 inches. High spring back and spring cushion. Padded seat ends. Genuine patent leather dash. Concave seat risers. Swell panels. Body glued, screwed and plugged.

GEAR—Tull sweep, oil-tempered springs. Onepiece wrought iron Baily body loops. 15-16 inch Long Distance dust-proof axles with Collinge Bell collars. Arch or drop. Axle caps perfectly fitted. Full circle, double plate, rear king bolt fifth wheel.

TRACK—Narrow (4 ft. 8 in.) or wide (5 ft. 2 in.)

WHEELS—SELECTED HICKORY. Sarven patent, 34 or 76 inch, 36-40, 38-42 or 40-44; 1 inch, 40-44. Full bolted, oval edge steel tires.

PAINTING—Gear, rich shade of red or fine shade of green, fancy striped. Body, seat and back mahogany finish, elegantly decorated.

UPHOLSTERING—Heavy green or blue cloth, whipcord, or green, maroon or tan genuine leather. Nickel seat handles, prop nuts, hub bands, double bar dash rail and lazy back rail. Fancy stitched fall. Floor carpet; carpeted side panels.

TOP—Leather quarters and leather back stays, with genuine rubber roof, back and side curtains; full leather with rubber side curtains, or genuine full rubber top. Cloth lining. Sewed valances. Fancy silk stitched back stays and side lacings. Three or four bows. Storm apron. Looking glass in back stays.

SHAFTS—Good quality hickory. Leather trimmed. Nicely finished. Shipped from the factory. AUTO SEAT TOP BUGGY.

Shipped from factory.



No. C233.

Cloth Trimmings.

		Net price each
	Top	
	Top	
Leather Quarte	er Top	49.80

Extras.

DESCRIPTION.

BODY—20, 22 or 24x54 inches. Square-cornered wide auto seat. Padded seat ends. Soft spring cushion. Concave seat risers. Swell panels. High back. Body screwed, glued and plugged. Metal edge boot.

GEAR—Oil-tempered, easy riding springs. Onepiece wrought iron Baily body loops. 15-16inch Long Distance axles with Collinge Bellcollars. Arch or drop. Full clipped axlesand full plated reaches. Full circle, double plate rear king bolt fifth wheel. Cemented axle caps.

WHEELS—SELECTED HICKORY. Sarven patent, 34 or 76 inch, 36-40, 38-42 or 40-44; 1 inch, 40-44. Full bolted, oval edge steel tires.

TRACK—Narrow (4 ft. 8 in.) or wide (5 ft. 2 in.)

PAINTING—Gear, a fine shade of red or Brewster green, neatly striped. Body, plain black (striped or decorated if ordered.)

UPHOLSTERING—Green or blue cloth whipcord or genuine trimming leather. Half length carpet. Carpeted side panels.

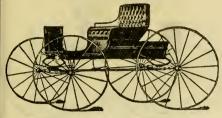
TOP—Leather quarters with rubber roof and back curtain, rubber side curtains; full leather top with rubber side curtains, or genuine full rubber top. Cloth lined. Storm apron. Three or four bows.

SHAFTS—Good quality hickory. Nicely finished. Leather trimmed.

Shipped from the factory.

ROAD WAGON.

Shipped from factory.



No. R89.

	Net price each.
Imitation Leather	Trimmed\$31.20
Leather Trimmed	33.60
Cloth or Morocco	trimmed 32.40

Extras.

Net price ea	ch.
Vith Punt Body, Full length Carpet and	
Body Rail\$1	.50
Vith Stick Seat 2	.50
For rubber tires see bottom of page 149	

DESCRIPTION.

BODY—New style. High panel spring back. Body screwed, glued and plugged. Boot.

GEAR—Long, easy riding, oil-tempered springs
15-16 inch Long Distance axles with Collinge
Bell collars. Arch or drop. Rear king
bolt fifth wheel. Full clipped axles and full
plated double reaches. Full length body
loops. Cemented axle caps.

TRACK—Narrow (4 ft. 8 in.) or wide (5 ft. 2 in.)

WHEELS—SELECTED HICKORY. Sarven patent, 34 or 36 inch, 36-40, 38-42 or 40-44; 1 inch, 40-44. Full bolted, oval edge, steel tires.

PAINTING—Gear, a fine shade of green or a rich shade of red, neatly striped. Body, black, nicely decorated.

UPHOLSTERING—Whipcord, cloth, genuine leather, morroccoline, or imitation leather, Brussels rug.

SHAFTS—Good quality hickory. Nicely finished.

STICK SEAT ROAD WAGON.

Shipped from factory.



No. R87.

	Net	price	each.
Imitation Leather Trimming			33.50
Leather Trimming			36.00
Cloth or Moroccoline			35.00

No. R189.

One grade cheaper throughout.

Net price each. Similaritation Leather Trimming.....\$29.40

DESCRIPTION.

BODY—Handsomely moulded. Swell spindle stick seat. Spring cushion. High patent leather dash. Body screwed, glued and plugged.

GEAR—Oil-tempered, easy riding springs. 15-16 inch Double Collar axles. Arch or drop, Rear king bolt fifth wheel. Full clipped axles. Full length body loops. Cemented axle caps.

TRACK—Narrow (4 ft. 8 in.) or wide (5 ft. 2 in.)

SHAFTS-Good quality hickory. Nicely fin-

WHEELS—SELECTED HICKORY. Sarven patent, ¾ or ¾ inch, 36-40, 38-42 or 40-44 1 inch, 40-44. Full bolted, round edge, steel tires.

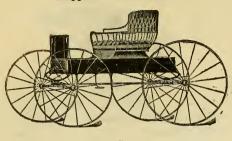
PAINTING—Gear, a fine shade of green or a rich shade of red, nicely striped. Body, black, neatly striped.

UPHOLSTERING—Whipcord, green or blue cloth, or green maroon or tan leather.

Carpet. Boot.

DRIVING WAGON.

Shipped from factory.



No. C76:

Whipcord Cloth or Moroccoline.

C+v1a	ĸ	Spindl	e Sea	at		 	Ne	t	pr	ice	each.
Style	H,	Combi	inatio Seat	n	Seat	 • •		:			39.00
Style	Ď,	Auto	Seat		• • • •	 ٠.	• • •	•		• •	42.00

No. D76.

Extras on all above.

			Net price each.
Genuine	Leather	Triminings	\$2.00

For rubber tires see bottom page 149.

DESCRIPTION.

BODY-17, 20, 22 or 24x54 inches. Swell spindle stick seat. Spring cushion. 12-inch patent leather dash, open hand-holds. Swell panels. Concave seat risers.

GEAR—Oil-tempered springs 15-16 inch Long Distance dust-proof axles with Collinge Bell collars. Arch or drop. One-piece wrought iron Bailey body loop, clipped on. Full circle rear king bolt fifth wheel. Hand fitted and perfectly cemented axle caps.

TRACK—Narrow (4 ft. 8 in.) or wide (5 ft. 2 in.)

WHEELS—SECOND GROWTH HICKORY. Sarven patent, 34 or 78 inch, 36-40, 38-42 or 40-44.

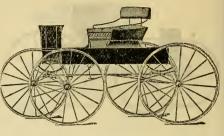
PAINTING—Gear, Perfection red or Brewster green, double line stripe. Body, plain black; inside panels finished.

UPHOLSTERING—Whipcord, green or blue cloth, or genuine trimming leather. Full length Brussels carpet.

SHAFTS—Good hickory. Leather trimmed. Shipped from the factory.

BIKE DRIVING WAGON.

Shipped from factory.



No. C210.

Whipcord or Cloth.

		Net pr	ice	each.
Style	L,	Panel Seat	\$	42.00
Style	Η,	Combination Seat		43.50
Style	K,	, Spindle Seat		43.50
Style	D,	Plain Auto Seat		46.50

Extras.

Net price each.
Genuine Leather Trimmed on all above..\$2.00
For rubber tires see bottom page 149.

DESCRIPTION.

BODY-22 or 24x56 inches. 12-inch patent leather dash. New style board seat. Soft spring cushion.

GEAR—High arch axles. Concealed axle caps. Full circle double plate fifth wheel, rear king bolt. One-piece wrought iron Bailey body loops. Long, easy riding, open head springs. 15-16 inch Long Distance axles with Collinge Bell collars.

TRACK-4 ft. 4 in., 4 ft. 8 in. or 5 ft. 2 in.

PAINTING—Gear, Perfection red or Bronze green, double line striping. Body, plain black.

WHEELS—High grade, Sarven patent, ¾ or ½ inch, 38-40 or 40-42. Round edge, steel tires, or ¾ or ½-inch solid rubber tires; can also furnish 1½ inch cushion rubber tires. (Be sure to specify which is desired.)

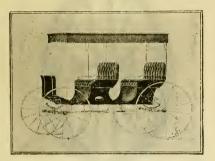
UPHOLSTERING—Fine whipcord, extra heavy green or blue broadcloth or genuine leather. Full length Brussels carpet.

SHAFTS—Good hickory. Genuine leather trimmed.

Shipped from the factory.

CANOPY TOP SURREY.

Shipped from factory.



No. C21.

Cloth Trimming.

net price each.
With Top\$63.60
Without Top 55.25
Extras.
Net price each.
Genuine Leather Trimmings\$3.00
Pole instead of Shafts
Lamps 2.00
Half Fenders 3.00
Full Fenders 6.00
For rubber tires see bottom Page 149

DESCRIPTION.

BODY—As shown in cut. Spring cushions.

High Spring backs. Patent leather dash.

Steel rocker plates.

GEAR—Full sweep, oil-tempered, easy riding springs. Full length body loops. 11/8 inch Long Distance axles with Collinge collars. Arch or drop. Axle caps perfectly fitted, cemented and full clipped. Rear king bolt fifth wheel.

TRACK—Narrow (4 ft. 8 in.) or wide (5 ft. 2 in.)

WHEELS—SELECTED HICKORY. Sarven patent, 7% inch, 36-40 or 40-44; 1 inch, 38-42 or 40-44; 1½ inch, 20-44. Full bolted, oval edge, steel tires.

PAINTING—Gear, a fine shade of green or rich shade of red, neatly striped. Body,

black, nicely striped.

UPHOLSTERING—Good quality of green or blue cloth, moroccoline or green maroon, or tan genuine leather. Full length worsted carpet.

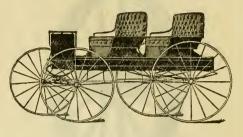
TOP—Canopy with rubber deck and curtains, deep fringe, cloth head lining.

SHAFTS-Good quality hickory, neatly finished.

Shipped from the factory.

THREE SPRING WAGON.

Shipped from factory.



No. W194.

Leather Trimming	rimming\$44.4048.0046.20
F	Extras.

For rubber tires see bottom Page 149.

DESCRIPTION.

BODY—30x76 inches. TWO THREE-QUAR-TER BACKS. Wood dash with nickel rail. Leather dash if ordered. Full width drop end gate. Removable seats. Hardwood floor running lengthwise. Body and seats are made entirely of selected white ash.

GEAR—Three oil-tempered elliptic springs. 1½ inch double collar steel axles. Norway wrought iron clips and bolts used throughout. Reach plate full length.

TRACK—Narrow (4 ft. 8 in. (or wide) 5 ft. 2 in.)

WHEELS—SELECTED HICKORY. Sarven patent, 7/8 inch, 20-44; 1 inch, 38-42 or 40-44; 13/8 inch, 40-44. Full bolted, oval edge, steel tires.

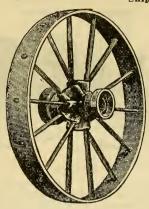
PAINTING—Gear, Brewster green or red, neatly striped or natural finish. Varnished ash body, finely striped. Painted if ordered.

UPHOLSTERING—Imitation leath pegamoid, or genuine leather.

SHAFTS—Good hickory. Well ironed, nicely finished.

Shipped from the factory.

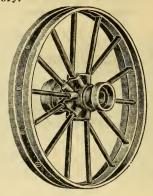
METAL WHEELS. Shipped from Factory.



PLAIN TIRE.

The farmer of today must have a low wagon and the cheapest way to get one, is to order a set of low steel wheels with either 4 inch, 5 inch, or 6 inch tire; 4 inch is considered the standard and we advise same for most all purposes. He can either use them on an old gear which he may have or can purchase very cheaply, or put them on his new farm wagon. He would very seldom want to put on high wheels, not more than half a dozen times dur-ing the year and it is very little trouble to change back and forth. We furnish these wheels to fit any size

spindle, simply measure the skeins according to the directions given on page 155 and we will furnish wheels that will fit the wagon.



GROOVED TIRE.

This cut represents our Truck wheels which we are putting on the market for stony roads. They do not wear out the rub lock as do the wheels made with the spokes projecting through wheels made with the spokes projecting through the rims. We make these wheels with special grooved rim, and allow the spokes, in addi-tion to the tapering head (as the tires are punched with tapering holes, large size out), to have a large head so as to make them per-fectly strong, in fact, stronger than can be made by countersinking the holes in tires of wheels as do other manufacturers of wheels wheels as do other manufacturers of wheels. These Wheels are made to fit any size skein

and iron axles.

We particularly recommend them to the users of Wheels in stony countries, as the heads of the spokes are protected so as not to come in contact with the rocks.

Grooved tires can be furnished only in 4 inch width—either 3% or 1/2 inch thick.

NET PRICE FOR ONE WHEEL.

Diam.	3x%	3x1⁄2	4x%	4x½	5x3%	5x½	6x3%	6x1/2
24 26 28 30 32 34 36 38 40 42 44 46 48	\$2.36	\$2.75 2.90 3.08 3.19 3.31 3.64 3.77 4.14 4.27 4.41 4.78 4.93 5.66	\$2.55 2.68 2.81 3.06 3.31 3.57 3.55 4.15 4.30 4.65 4.80 5.46	\$2.95 3.08 3.23 3.51 3.81 4.10 4.30 4.40 4.80 4.95 5.34 5.55 6.28	\$2.94 3.08 3.32 3.43 3.57 3.92 4.08 4.46 4.59 4.76 5.14 5.31 6.00	\$3.28 3.54 3.82 3.94 4.10 4.50 4.69 5.14 5.28 5.47 5.90 6.11 6.90	\$3.21 3.38 3.64 3.76 3.91 4.30 4.48 4.90 5.03 5.22 5.62 5.82 6.54	\$3.69 3.88 4.18 4.32 4.50 4.94 5.15 5.63 5.78 6.01 6.46 6.70 7.51

Note.-Grooved Tire Wheels cost 25 cents extra, each.

3/8 in. tired wheels carry 4000 lbs., 1/2 in. tired wheels carry 5000 lbs.

Note.-See next page diagram for ordering.

GENEVA METAL WHEELS. Shipped from Factory.



Heavy Pattern.

For loads 5,000 lbs. per Set of Four wheels

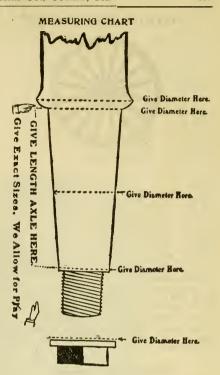
Net Price per Each Wheel.

Diam.	Spokes.	Tire. ½x3	Tire.	Tire.	Tire. 3/8×6
		3/8×4			
24 in.	10	\$4.10	\$4.25	\$4.40	\$4.55
26 in.	10	4.25	4.40	4.55	4.60
28 in.	12	4.40	4.55	4.65	4.80
30 in.	12	4.55	4.70	4.70	4.95
32 in.	12	4.70	4.85	4.95	5.10
34 in.	14	4.85	5.00	5.10	5.25
36 in.	14	5.00	5.15	5.25	5.40
38 in.	14	5.15	5.30	5.40	5.65
40 in.	16	5.30	5.48	5.55	5.70
42 in.	16	5.48	5.60	5.70	5.85
44 in.	16	5.60	5.75	5.85	6.00
46 in.	18	5.75	5.90	6.00	6.15
48 in.	18	5.90	6.10	6.15	6.30

Made to fit any standard size skein 9 in., 10 in. or 11 in. long.

For fitting hubs to solid axles add 30c per wheel.

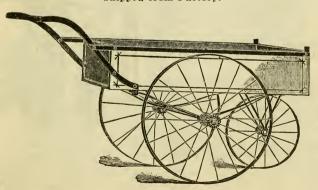
For hubs 12 inches long add 25c per wheel.



PRICES ON METAL WHEELS ARE F. O. B. FACTORIES.

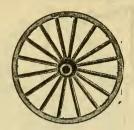
THEY ARE ALL MADE TO ORDER AND SHIPPED DIRECT.

No. 14 HAND CART. Shipped from Factory.



Has a wood body and is well ironed; is strong, durable, neat and light.

SARVEN PATENT WHEELS.



Sarven Wheel.

Sizes.			Net price First	per set. Second
Thread	. Spoke.	Hub.	Grade.	Grade.
3/4 in.	15 in.	6½ in.	\$ 7.25	\$ 6.00
% in.	1 re in.	6½ in.	7.50	6.50
1 in.	1½ in.	6½ in.	8.00	6.75
1 1/8 in.	1¼ in.	7 in.	9.00	7.60
1¼ in.	13% in.	7½ in.	12.00	10.00
13% in.	1½ in.	8 in.	17.00	13.00
1½ in.	15% in.	8½ in.	20.00	16.00
337-		C 1		

We carry only first and second grades in untired wheels.

Note.—Regular heights carried in stock, 3^2 , 3^6 , 3^4 and 3^8 , 3^9 and 3^{10} . We can furnish any height desired on short notice.

These Wheels are strictly first-class.

Half sets Wheels at half price of full sets; quarter sets at quarter price of full sets and 25 cents added.

WOOD HUB WHEELS.

Shipped direct. Prices same as Sarven Wheels.

TIRED WHEELS.

For Wheels with Tire Set ADD the following to the prices above:

		11/8 x 1/4 \$2.75
3/4 x 1/4	1.80	$1\frac{1}{8}$ $\times \frac{5}{16}$
		$1\frac{1}{4}x_{16}^{5}$
		$1\frac{1}{4}x\frac{3}{8}$
$1 \times \frac{3}{16}$	1.80	$1\frac{3}{8}$ x $\frac{3}{8}$
1 x 1/4	2.25	$1\frac{1}{2}$ x\frac{1}{2}

SPECIAL GRADE SARVEN WHEELS. FURNISHED ONLY WITH TIRES ALL SET.

To meet competition we are offering "Special Grade" Wheels with tires attached, suitable for repair work. We guarantee them to be better than any wheel sold elsewhere at the same price. A good repair wheel. Can furnish only sizes and heights named below:

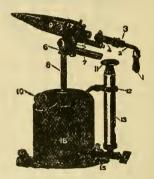
			Net pr	ice per
Tire.	Spoke.	Hub.	Height.	set.
3/4 X 18	₹ in.	6½ in.	34 38 36 310	\$7.00
7/8×1/4	1 de in.	6 ½ in.	66	7.75
1 x1/4	1 1/2 in.	6½ in.	"	8.50
11/8×1/4	11/4 in.	7 in.	66	10.00
11/4×16	13% in.	7½ in.	66	13.50

Half sets at half price of full sets; quarter sets at quarter price of full sets and 25 cents added.

SETTING BOXES.

When Axles and Tired Wheels are ordered, we can set the boxes if you wish, and charge for 1½-inch axles and smaller 75 cents per set, 1¾ and 1½ in. \$1.00 per set. The work is carefully done by an experienced wagonmaker. We do not set boxes in Untired Wheels. We only set boxes when old boxes are sent us charges prepaid or both axles and boxes are purchased. If you order a gear and want boxes set in the wheels add 45 cents for express on axle boxes from gear factory to us. We do not paint wheels.

THE RELIABLE PAINT BURNER.

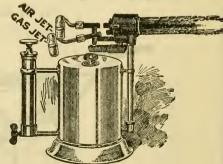


No. 15.

Is an Automatic Air Pressure Burner, throwing a powerful blue flame from six to eight inches in length; flame can be thrown up or down or straight ahead, without changing position of hand that holds.

Price each\$3.50

BRAZING TORCH.



No. 92.

The Turner Double Jet Gasoline Torch No. 92. Polished Brass, one quart size, each. \$5.00 Especially adapted for Rubber Tire Work. Guaranteed to produce a 1,000 degree hotter

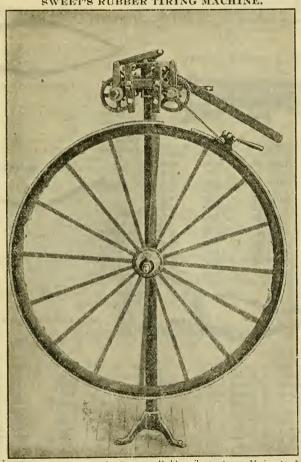
Guaranteed to produce a 1,000 degree hotter blast than any other brazing torch now on the market.

No brazing torch ever put on the market has ever equalled this one for reliable service.

HEAVY-SARVEN AND WARNER WHEELS. We quote for shipment direct from the factory.

Tro quoto tot outpute attent the table.								
Spoke	T	Iub		Ma	Net price per Set			
орожо			Ri	m	He	ight		
Size	Diam.	Length	Thread	Depth	Front	Hind	Grade 1	Grade 2
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	4 ½8 4 ½8 4 ½8 4 ½8 4 ½8 5 5 5 % 6 6 3 % 6 6 3 % 6 6 9 % 7 ½4	7½ & 8 7½ & 8 8 & & 8½ 8 ½ & 9 9 to 11 10 to 11 10 to 11 11 to 12 11 to 13	1 16 1 1/2 1 1/8 1 1/8 1 1/8 2 1/8 2 1/8 2 1/8 2 1/8 2 1/8 2 1/8 2 1/8	1 5/8/4 1 3/4/4 1 3/4/4 1 1/4/4 2 1/2/2 2 3/4 3 3	Any height desired not exceeding 4 feet.	Any height desired not exceeding 4 feet 8 inches.	\$14 75 16 50 17 50 19 65 23 50 27 00 30 00 33 00 36 00 39 00 42 00	\$12 00 13 00 14 50 16 00 20 50 23 50 24 50 26 50 28 50 31 50 33 00

SWEET'S RUBBER TIRING MACHINE.



This machine is tor applying and repairing Rubber Tires from $\frac{3}{4}$ in, to $\frac{1}{2}$ in. We can fully recommend it to you as being the best ever produced. It is self contained, finishing the job without removing the wheel, takes up very little space, requires very little power, and is so simple that anyone can run it.

The Rubber Tire business has reached condition that every repair shop, also every repository should be equipped to put on and repair rubber tires. This machine makes it possible for them to do this at a small cost. We guarantee satisfaction, or no pay. Complete directions as to how to operate machine, also lengths of rubber to use on each size wheel, weights of rubber and channel and other necessary information sent with machine.

Net price each.......\$13.00

Shipped from Factory.

RUBBER TIRE ACCESSORIES.

WAGON SEAT SPRINGS.



Size	s.					Net	pr	ice	per	pair.
11/4	wide,	2	leaf,	24	inches	long.				\$0.48
13/8	wide,	2	leaf,	25	inches	long.				50
11/2	wide.	2	leaf,	26	inches	long.				.55
11/2	wide,	3	leaf,	28	inches	long.				80

SPALDING BOLSTER SPRING.



No. Springs to For 38-in. For 42-in. Width. Leaf. 1½ 3 1,000 lbs. \$3.50 \$4.00 1½ 4 1,500 lbs. 3.75 4.00 1¾ 4 2,000 lbs. 5.00 5.50 2 5 3,000 lbs. 5.00 5.50 2 6 4,000 lbs. 6.00 6.50 2 7 5,000 lbs. 6.00 6.50 2 7 5,000 lbs. 8.00 8.75 2½ 6 6,000 lbs. 8.00 8.75 2½ 7 7,000 lbs. 8.00 8.75	,				
Width. Leaf. Carry. Bolster Bolster 1½ 3 1,000 lbs. 3.50 \$4.00 1½ 4 1,500 lbs. 3.75 4.00 1¾ 4 2,000 lbs. 4.50 5.00 1¾ 5 2,500 lbs. 5.50 6.00 2 5 3,000 lbs. 5.50 6.00 2 6 4,000 lbs. 6.00 6.50 2 7 5,000 lbs. 6.50 7.00 2½ 6 6,000 lbs. 8.00 8.75 2½ 7 7,000 lbs. 8.75 9.50		-		Net price	per set.
1½ 3 1,000 lbs. \$3.50 \$4.00 1½ 4 1,500 lbs. 3.75 4.00 1¾ 4 2,000 lbs. 5.00 5.50 1¾ 5 2,500 lbs. 5.00 5.50 2 5 3,000 lbs. 5.50 6.00 2 6 4,000 lbs. 6.50 7.00 2 7 5,000 lbs. 6.50 7.00 2½ 6 6,000 lbs. 8.00 8.75 2½ 7 7,000 lbs. 8.75 9.50		No.	Springs to		
1½ 4 1,500 lbs. 3.75 4.00 1¾ 4 2,000 lbs. 4.50 5.00 1¾ 5 2,500 lbs. 5.00 5.50 2 5 3,000 lbs. 5.50 6.00 2 6 4,000 lbs. 6.00 6.50 2 7 5,000 lbs. 6.50 7.00 2½ 6 6,000 lbs. 8.00 8.75 2½ 7 7,000 lbs. 8.75 9.50	Width.	Leaf.	Carry.	Bolster	Bolster
134 4 2,000 lbs. 4.50 5.00 134 5 2,500 lbs. 5.00 5.50 2 5 3,000 lbs. 5.50 6.00 2 6 4,000 lbs. 6.00 6.50 2 7 5,000 lbs. 6.50 7.00 2½ 6 6,000 lbs. 8.00 8.75 2½ 7 7,000 lbs. 8.75 9.50	11/2	3	1,000 lbs.	\$3.50	
134 5 2,500 lbs. 5.50 5.50 2 5 3,000 lbs. 5.50 6.00 2 6 4,000 lbs. 6.00 6.50 2 7 5,000 lbs. 6.50 7.00 2½ 6 6,000 lbs. 8.00 8.75 2½ 7 7,000 lbs. 8.75 9.50	11/2	4	1,500 lbs.	3.75	
2 5 3,000 lbs. 5.50 6.00 2 6 4,000 lbs. 6.00 6.50 2 7 5,000 lbs. 6.50 7.00 2½ 6 6,000 lbs. 8.00 8.75 2½ 7 7,000 lbs. 8.75 9.50	13/4	4	2,000 lbs.		
2 6 4,000 lbs. 6.00 6.50 2 7 5,000 lbs. 6.50 7.00 2½ 6 6,000 lbs. 8.00 8.75 2½ 7 7,000 lbs. 8.75 9.50	13/4	5	2,500 lbs.		
2 7 5,000 lbs. 6.50 7.00 2½ 6 6,000 lbs. 8.00 8.75 2½ 7 7,000 lbs. 8.75 9.50	2	5	3,000 lbs.		
2½ 6 6,000 lbs. 8.00 8.75 2½ 7 7,000 lbs. 8.75 9.50	2	6	4,000 lbs.	6.00	. 6.50
2½ 7 7,000 lbs. 8.75 9.50	2	7	5,000 lbs.	6.50	7.00
7/4 : 1/0.0 1/10 : 1/11	21/2	6	6,000 lbs.	8.00	8.75
0.1/ 0.000 11 0.50 10.05	21/2	7	7,000 lbs.	8.75	
	21/2	8	8,000 lbs.	9.50	10.25
2½ 9 9,000 lbs. 10.25 11.00	21/2	9	9,000 lbs.	10.25	
2½ 10 10,000 lbs. 11.00 11.75	21/2	10	10,000 lbs.	11.00	11.75

Springs 6,000 capacity and larger and all 42-inch bolsters shipped direct from factory.



ELLIPTIC SPRINGS.



Half Double Sweep, Berlin Heads. Net price each.
thet price cach.
\$0.90
1.05
1.25
1.40
1.65
1.75
We can furnish other sizes from fac-

ELLIPTIC SPRINGS.



No.	5.	Full	Elliptic	Button	Head.
Sizes.				Ne	t price each.
1/4 x3x34					\$0.85
1/4 x4x34					
1/4 x3x36	• • •				
1/4 x4x36		• • • •			1.15
					1.40
½x4x36					1.65
1½x5x36		• • • • •			1.00

CART SPRINGS.

		No. of the last of	
Sizes.	-	Net	price each
11/4 x4x38	 		\$0.70
11/4 x4x40	 		75
13/8×4×38			
136x4x40	 		80
1½x4x38	 		80
1½x4x40	 		85
1 ½ x5x42			

Our springs are made by the best spring makers in the country—oil-tempered. Tested before shipping.

PLATFORM SPRINGS.

Cut shows No. 15 Side and No. 16 Cross Platform Springs (put together.)

Width of												N	let price	per set
Steel.		Side	Sn	ring.			Cross	Sp	ring.		2 Cr		4 Side	
11/4	4	leaves,			long	5	leaves,					700	lbs.	\$4.75
11/4		leaves,					leaves,					650	1bs.	5.10
13/8		leaves,					leaves.					900	lbs.	5.10
13/8		leaves,					leaves,						lbs.	5.50
1 1/2		leaves,					leaves,						lbs.	5.60
11/2		leaves,					leaves,						lbs.	5.75
														7.10
11/2	b	leaves,	40	inches	long		leaves,						lbs.	
11/2	6	leaves,	40	inches	long	7	leaves,	42	inches	long	1	725	lbs.	7.95
13/4	5	leaves,	40	inches	long	6	leaves.	42	inches	long	1	725	lbs.	8.35
1 3/4		leaves.				7	leaves,	42	inches	long	2	100	lbs.	9.85
2		leaves.					leaves,				2	450	lbs.	11.50
2		leaves,					leaves,				2	700	lbs.	12.45
21/4		leaves,					leaves,				3	250	lbs.	16.40
		leaves,					leaves,				3	800	lbs.	17.50
2 1/2	0	icaves,	40	menes	rong	9	icaves,	10	menes	TOTA	U	000		20

Broken Sets, Net Price per 1b.....\$0.061/2

No. 1 BENT HICKORY RIMS.



Eight Pieces to a set for 4 Wheels.

Sizes.	Per Set. How Packed and Heights carried in stock.
7 ₈ x 1 Deep	$\{1.20\}$ Full set in bundle $3^4 - 3^8 - 3^{10}$.
% x 1 % Deep	1.20 Half set in bundle 32-34-36-38-310.
1 x 11/4 Deep	1.28 Half set in bundle 32-34-36-38-310-4.
1½ x 1½ Deep 1½ x 1¼ Deep	1.25 1.35 1.95 Full set in bundle 3 ⁸ -3 ¹⁰ . 1.95
	1.95 Full set in bundle 34-38-36-310-38-4.
15% x 15% Deep	2.20 Full set in bundle 38-4.
•	•

BEVELED HICKORY BUGGY RIMS.

3/4 x 1 1/8	Deep	\$1.50
7/8 x 1 1/8	Deep	1.50 Half set in bundle 32-34-36-38-310-
1 x 1 1/8	Deep	1.60 Half set in bundle 32-32-30-30-310
1 x11/4	Deep	

HICKORY HAY RAKE RIMS.

Four Pieces to a set for 2 Wheels.

11/4 x 11/4	Deep	1.00 Full set in bundle 1.05 Full set in bundle 1.05	
12/ 12/	Dasa	1 of Full set in bundle 4	8
1%8 X 1%8	Беер		

BENT OAK WAGON AND TRUCK RIMS.

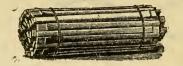


Eight Pieces to a set for 4 Wheels.

1¾ x 2 1¾ x 2¼		\$2.15 } 		
13/4 x 21/2	Deep	3.50	Half set in bund	le 38-4.
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Deep	$\begin{bmatrix} 2.35 \\ 2.95 \\ 3.50 \end{bmatrix}$	Half set in bun	dle 34-36-38-310-4.
$2\frac{1}{2} \times 2$	Deep	2.95	Single pieces 3-3	2-34-36-38-310-4.
3 x 1½ 3 x 2 3½ x 1½ 3½ x 2 4 x 1½ 4 x 2	Deep Deep	2.75 3.60 3.35 4.20 3.75 4.95	Single pieces 3-3	²-3⁴-3 ⁶ -3 ⁸ .

NOTICE:—We do not break bundles of rims. Special sizes ordered upon request. Our rims are strictly up to grade and better quality than many firms' who grade higher.

OAK WAGON SPOKES.



Fifty-two Spokes to a set.

OAK WAGON SPOKES.

WHITE OAK SECOND GROWTH A. B.

Our A. B. grade is a new grade of white oak, second growth, and is made up of selected A. and B. stock with the larger percentage of A. grade.

A. grade.
These spokes are of excellent quality—try them.

		P	rice Per	Price Per	Price Per
			Bundle	Bundle	
Sizes.			Fronts	Hinds	Full Set
11/2 1	inch		\$1.45	\$1.75	\$3.20
15/8	inch		1.50	1.95	3.45
134 i	nch		1.75	2.20	3.95
1% i	nch		1.85	2.35	4.20
	inch		2.10	2.60	4.70
21/8 i	nch		2.20	2.75	4.95
21/4	inch		2.40	3.05	5.45
	inch		2.60	3.10	5.70
21/2 i	nch		2.85	3.35	6.20
25% i	nch			3.60	6.45
23/4	inch		3.20	3.75	6.95
3	inch		3.30	"3.90	7.20
We	do	not break	bundles	S.	

WHITE OAK EXTRA A OR XXX.

		Price Per	Price Per	Price Per
		Bundle	Bundle	
Size	s.	Fronts	Hinds	Full Set
11/2	inch	\$1.10	\$1.40	\$2.50
15%	inch	1.20	1.55	2.75
	inch	1.40	1.85	3.25
1%	inch	1.50	2.00	3.50
2	inch	1.65	2.10	3.75
21/8	inch	1.75	2.25	4.00
21/4	inch	2.00	2.50	4.50
23/8	inch	2.10	2.65	4.75
21/2	inch	2.30	2.95	5.25
	inch	2.50	3.00	5.50
	inch	2.65	3.10	5.75
3	inch	2.75	3.25	6.00
W	e do	not break bundle	es	

PIN AND RED OAK-OUR SPECIAL.

		1	Price Per Bundle	Price Per Bundle	Price Per
Size	9		Fronts	Hinds	Full Set
13/4	inch			\$1.20	
17/8	inch			1.30	2.30
2	inch			1.40	2.50
21/8	inch		. 1.25	1.50	2.75
21/4	inch		. 1.35	1.65	3.00
	inch		. 1.50	1.75	3.25
	inch		. 1.55	1.85	3.40
25/8	inch		. 1.65	2.00	3.65
	inch		. 1.75	2.20	3.95
3	inch			2.40	4.30
W	e do	not break	bundles		

SELECT REPAIR SPOKES.

		Price Eac				
7/8	inch	\$	0.05	17/8	inch	 . \$0.06
1	inch		.05		inch	
116	inch		.05	21/8	inch	 07
11/8	inch		.05		inch	
11/4	inch		.05	23/8	inch	 08
					inch	
11/2	inch		.05	25/8	inch	 09
15/8	inch		.05	23/4	inch	 09
13/4	inch		.05	3	inch	 10

SARVEN WHEEL SPOKES.

	Net price each.		Net price
Sizes.	each.	Sizes	each
% inch	\$0.05	11/4 inch	\$0.051/2
1 inch		13% inch	06

SHELL BAND WHEEL SPOKES.

Sizes.	Price each.	Sizes. Price each.
3/8 inch	\$0.06 1/2	11/8 inch\$0.061/2
1 inch	06 1/2	11/4 inch061/2
1 16 inch	06 1/2	l .

WARNER WHEEL SPOKES.

Sizes.	Price each.	Sizes.	Price each.
1/8 inch	\$0.06 1/2	11/2 inch.	\$0.061/2
1 inch	061/2	11/4 inch.	06 1/2
I.L. inch		7.	

RAKE SPOKES.

Sizes.	Sizes.
1½ inch	$\$0.07\frac{1}{2} \mid 1\frac{3}{4} \text{ inch} \$0.07\frac{1}{2}$

Our stock of spokes, rims, hubs, shafts and general woodwork is of honest quality; we carry a large, clean stock and highly recommend same to our customers.

SECOND GROWTH HICKORY WOOD HUB SPOKES.



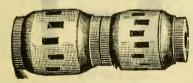
B-Grade.

		Net price		
Sizes.	per set.	Sizes. per set.		
7/8 inch	\$3.15	1 1/4 inch\$3.50		
1 inch	3.15	13/8 inch 3.50		
1 to inch	3.15	1½ inch 3.75		
		15% inch 3.75		
We do not break bundles.				

C-Grade.

	Net price per set.	1	Net price
Sizes.	per set.	Sizes.	per set.
7/8 inch	\$2.20	11/4 inch	\$2.50
	2.20		
1 1 inch	2.20	11/2 inch	2.85
11/8 inch	2.20	15/8 inch	2.85
Note	Our Wood Sto	ock is the b	est.
We do	not break bun	dles.	

BLACK BIRCH HUBS.



Dodge Mortise Straight End.

		Net	price	Net price					
S	izes.	p	er set.	Sizes.	per set.				
5	x7		.\$0.90	7 x 91/2	\$1.20				
5	1/2×7		90	71/2x 9	1.20				
6	x7			8 x10	1.50				
6	x8			8½x10	1.55				
	x8 1/2			81/2×11	1.65				
	1/2 x8			9 x11	1.70				
	1/2 x8 1/2			9 x12	1.85				
	x81/2			9½x12	1.90				
	x9			10 x12	2.00				
ľ					per hub.				

BLACK BIRCH HUBS.

Dodge Mortise Cupped.

Length is measured inside cup.

	Net price		Net price
Sizes.	per set.	Sizes.	per set.
71/2 x 81/2	\$1.25		
7½x 9	1.30	9 x11	
8 x 9	1.50	9 x12	
7½x10	1.50		
8 x10	1.60	9½x12	
8½x10	1.65	10 x12	2.20

Less than full sets, 10c extra per hub. Note.—Our Hubs are all 12 and 14 Dodge mortise. Be sure to state in your order how many mortiscs wanted.

HALF FINISHED BUGGY SHAFTS.



Finished to Bar without Mortise or Bar.

			Net	price per
			pair.	doz. pairs.
Sizes.			XX	XX
13/8×17/8	inch	 	.\$1.00	\$11.50
13/8x2	inch	 	. 1.00	11.50
1½x2				12,50
1 1/2 x 2 1/4	inch	 	. 1.20	14.00

FINISHED BUGGY SHAFTS.



			price per
		pair.	doz. pairs.
izes.		XX	XX
3/8×17/8	inch	 \$1.15	\$13.00
3/8×2			13,00
1/2 x2			14.50
			16.00

HALF FINISHED DOUBLE BENT HEEL WAGON SHAFTS.



Finished to Bar-Without Mortise or Bar.

Sizes.									N	e	t	1)1	ri	c	e	p	eı	pair. XX
11/2 x2																			
11/2 x2 1/4																			
13/4 x2 1/4	inch																		1.90
2 x2 1/2	inch																		2.40

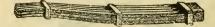
FINISHED DOUBLE BENT HEEL WAGON SHAFTS.



Finished Cross Bars Included.

Sizes.										-			Ī		påir. XX
1 1/2 x2	inch														\$1.70
11/2 x2 1/4	inch														2.25
13/4×21/4	inch														2.25
2 x2 ½	inch														2.75

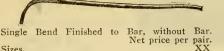
HALF FINISHED STRAIGHT HEEL WAGON SHAFTS.



Finished to Bar.

				price per
		T.	oair.	doz. pairs.
Sizes.			XX	XX
1 1/2 x 2 1/4	inch	\$	31.10	\$12.50
2 x21/2	inch		1.85	21.00
Note	-Our	Wood Stock is	the be	est.

No. 18 HALF FINISHED CART SHAFTS.



134x21/4 inch\$1.55 HALF FINISHED SINGLE BEND POLES.

		Net	price
		each.	per doz.
Sizes.	111111111111111	XX	XX
	inch	\$1.30	\$15.00
	inch		15.00
	inch		20.50

FINISHED SINGLE BEND POLES.



			price
		each.	per doz.
Sizes.		XX	XX
	inch	\$1.65	\$19.00
			19.00
		2.05	24.00

HALF FINISHED DOUBLE BEND POLES.

			price •
		each.	per doz.
Sizes.		XX	XX
	inch	\$1.30	\$15.00
2 x2½	inch	1.30	15.00
		1.77	20.50
			·

FINISHED DOUBLE BEND POLES.



FINISHED STRAIGHT OR PLAT-FORM POLES.

Note .- Our Wood Stock is the best.

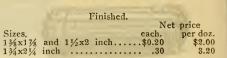
	_		Ne	t price
9.11			each.	per doz.
Sizes.			XX	XX
2x2 1/2	inch		\$1.50	\$17.50
, -	DINISHE	ing as	JE CIRCI	LES.



Net price per doz.

grade and better quality than many firms who grade them higher.

CUTTER AND SHAFT CROSS BARS.

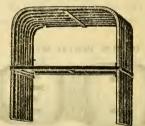


BUGGY BOWS.



Four Bows to a Set.
To be used with Steel Bow Sockets. Net price per set. Sizes. Buggy Bows 3/4 x1 1/4 inch 32-34-36-38-40-42-46 in.

EXPRESS WAGON BOWS.



Four Bows to a Set.

Net price per set. Sizes. %x13% inch 34-36-38-40-42-44-46-48 in....\$1.25 Note.—Give width outside.

BENT WAGON HOUNDS.



Sizes. Net price each. Bent Wagon Hounds, 2x3 inch.....\$0.90

IRON BUGGY SHAFTS.



Sizes. Net price per pair.

60c extra.

ROUND END BUGGY SINGLETREE WOODS.

THE RESERVE THE PERSON NAMED IN

Net price. Sizes. Each. Doz. 13/8 x17/8 inch\$0.18 \$1.80 1½x2 inch 2.15 1 1/2 x 2 1/4 inch .25 2.50

SWORD OR FLAT END SINGLE-TREES.

		Net price.
Sizes. 1½x1¾ 1¾x1¾	inch	Each: Doz.
13/8 x2	inch	

HICKORY WAGON SINGLETREE WOODS.

Condition of the state of the s

		Net	price.
Sizes.	- 11	Each.	Doz.
2 x25/8	inch	 \$0.18	\$1.85
21/8 x2 3/4	inch	 20	2.00
21/4 x3	inch	 23	2.40

Round.

		Net	price.
Sizes.		Each.	Doz.
21/2 inch	Center	\$0.20	\$2.10
25/8 inch	Center	22	2.35

HICKORY BUGGY AND EXPRESS

NECK YOKE WOODS.

					Net	price
Sizes.					Each.	Doz.
1½x42	Acorn	End,	2nd	Growth.	.\$0.17	\$1.80
13/4×42	Acorn	End.	2nd	Growth	18	1.90
				Growth.		2.00
				Growth.		2.10

FINISHED BUGGY NECK YOKES.



J	оск	EY	NECK	YOKE	woods.
Net :	price	per each	dozen		\$1.50

HICKORY WAGON NECK YOKE WOODS.



c.		Net price.
Sizes.		Each Dog
2 ½ x38	inch	 .\$0.29 \$3.00
2 9/8 X 4 2	inch	 35 3.50
2 1/4 x 44	inch	 35 3.60
3 x48	inch	 40 4.25
31/4 x48	inch	 . 42 4.50

HICKORY BUGGY AND EXPRESS EVENERS.



Dressed and Rounded. Forest.

13/8×21/4×48	Buggy, XXX	Each\$0.25	Doz. \$2.75
15/8x25/8x48	Express, XXX	30	3.00
134x234x48	Heavy Express, X	XX30	3.25
13/4x3 x48	Heavy Express, Y	XXX .35	3.40

HICKORY WAGON EVENERS.



Dressed and Rounded.

C!			Ne	price.
Sizes.	• .	T 1 1 .	Each.	Doz.
2 x4 x48	in.	Light	Wagon\$0.35	\$3.75
~ AT ATO	111.	T. al III	Wagon35	3.75

TURNED HICKORY AXLES.

CONTRACTOR OF THE PARTY.

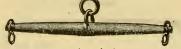
Size	es.		Net price each	
21/2	inch	Skein	\$0.65	2
23/4	inch	Skein		2
3	ıцch	Skein		5
31/4	inch	Skein	1.19	3
3 1/2	inch	Skein		5
3 %4	inch	Skein	1.40)
*	mcn	Skein	1.5	3

WHITE ASH FINISHED POLES.

Square Butts.

Size]	Ne	t	pr	ice	6	each.
3	inch	at	double	tree.	 				٠		. 5	\$1.30
31/4	inch	at	double	tree.	 							1.30
31/2	inch	at	double	tree.	 							1.30
3 3/4	inch	at (doublet	ree	 							1.35
4	inch	at	double	tree.	 					٠.		1.35

IRONED WAGON SINGLETREES.



2x25/8x36 inch.

Sizes. Net price per doz. 5% inch Center Clips and ½ inch Rings, 1¼ End Ferrules and ¾ inch Hooks..\$4.50

IRONED WAGON NECK YOKES.



Net price per doz. Sizes. 25/8×40 inch long\$6.25 Price each

EVERLASTING JOCKEY NECK YOKES.



Note.—The Everlasting Goods are Stronger, More Durable and Lighter and Neater in appearance than any made.

CUTTER RUNNERS.

Net price per pair. 11/4 inch\$1.00

IRONED WAGON DOUBLETREES.



Net price each. 2x4x48 inches long\$0.70

AUTOMATIC-GRIP NECK YOKES.



Acorn Ends Japanned.

Size	es.						Net	price	each.
No.	2	Fits	11/8	to	1 1/4	Pole	Tip		\$0.50
No.	10	Fits	13/8	to	11/2	Pole	Tip		.50
No	11	Trite	15%	to	17/6	Pole	Tin		.50

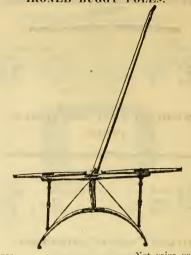


AUTOMATIC

GRIP NECK YOKE CENTER.

Sizes.		Ne	t	pri	ce	each.
Buggy					٠.	.\$0.30
Carriage						
Spring Wa	igo:	n.				30

IRONED BUGGY POLES.



Net price each. Sizes. 13/4x21/2 inch\$3.75 x2½ inch 3.85 XXX Finished complete with Singletrees and Doubletrees, including Neck Yoke. Note.-We can furnish above painted black for 75c extra.

OVAL BREAST YOKE, NEW YORK STYLE.



Net price per pair.

No. 48-A .- Oval woods, 23/8x2x23 in., 3/4 in, forged steel staple at center, 16 in. cye-bolts, 5 in. rings.....\$0.85

NEW ERA BREAST YOKE.



Net price per pair.

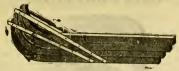
No. 45-A.—Round woods, 178 in. x 21 in. split staple, 7 in. eye-bolts, 5 in.\$0.85 rings





No.				Net pr	ice per	1,000
54-A.	3/8 x1 1/4	in				. \$0.55
54-B.	½x1¼	in				
54-C.	5/8 x 1 1/4					
64-D.	3/4 x1 1/4	in				70
	in pacl	kage.	We	do not	break	pack-
arred						

BENT OAK FOR RUNNERS.



Regular	Bend.	Four	to	а	Set.

Sizes.			Net	price	per	set.
134 inch Tre	ead, 2	inch	Deep		\$	1.55
2 inch Tr	ead, 2	inch	Deep			1.60
2 inch Tr	ead, 21/2	inch	Deep			2.00
2 inch Tr	ead, 3	inch	Deep			2.40
2 inch Tr	ead, 4	inclı	Deep			3,00
2 inch Tro	ead, 41/2	inch	Deep			3.80
2 inch Tr	ead, 5	inch	Deep			4.45
21/2 inch Tr	ead, 2	inch	Deep			2.05
21/2 inch Tr	ead, 4	inch	Deep			3.80
3 inch Tr	ead, 2	inch	Deep			2.25
31/2 inch Tr	ead, 2	inch	Deep			2.40
4 inch Tr	ead, 2	inch	Deep			2.60
41/2 inch Tr	ead, 2	inch	Deep			2.85
5 inch Tr	ead, 2	inch	Deep			3.05
5 inch Tr	ead, 21/2	inch	Deep			3.55
6 inch Tr	ead, 2	inch	Deep			3.85

VALENTINE'S PURE COLORS IN OIL.

DIACNS.	
	Net price per lb.
Jet Black	25e
Ivory Black	22c
Drop Black	220
Coach Black	21c
Lettering Black	20c
Refined Lamp Black	180

BLUES.

						ľ	Ve	t	I	r	ic	e	I	e:	r li	b.
Prussian	Blue	 													.60)c
Ultramari	ine Blue														.38	ic

REDS.

Net price per lb.
Western Red40c
Tuscan Red30c
English Vermillion, L and D\$1.00
American Vermillion, L and D25c
Coach Painters' Vermillion60c
Indian Red20c
Venetian Red13c
CDEPAG
CREENS

							Net	: pri	ce	per	ID.
Chrom	e Gr	een,	L	Μ	and	D					18c
Blind	and	Shut	te r	Gr	een,	L	М	and	D.		18c

YELLOWS.

]	Net	price	per	lb.
Chrome	Yellow,	L	M	0	and	D	0		22c
Yellow	Ochre	٠.,٠							.12c

BROWNS.

					N	e	t	pi	i	C	1	ıe	ľ	I	٥.
Raw a	ind	Burnt	Sienna.	 										18	Зe
Raw a	and	Burnt	Umber.	 			٠.							17	c
Vandy	ke	Brown		 										18	ЗC

VALENTINE'S SUPERFINE COACH COLORS.

GROUND IN JAPAN.

	Net	price	per lb.
Coach Black			\$0,30
American Vermillion, L			
American Vermillion, D			40
Coach Painters' Vermillion.			
Wine Color, L			40
Wine Color, D			40
Brewster Green, L			50
Brewster Green, D			

SHERWIN-WILLIAMS COACH VARNISHES,





Net price each.

This is unquestionably the best all around varnish made. Give it a trial. It will do your work to your satisfaction. Packed in half-gallon and gallon cans.

Sizes in stock. ½ Gals.	Gals.
Wearing Body Varnish (finishing coats, best work)\$1.80	\$3,40
Finishing Gear Varnish (finishing running parts) 1.58	2.95
Heavy Gear Varnish (one coat finishing, general work) 1.35	2,55
No. 1 Gear Varnish (quick drying finishing, ordinary work). 1.12	2.12
Quick Rubbing (a 2-day rubbing) 1,35	2.55
No. 1 Rubbing Varnish (a quick rubbing, ordinary work) 1.12	2.12
Quick Black Rubbing Varnish for under coats (ordinary	
work) 1.35	2.55
Coach Japan (for drying and hardening paints)	1.28
No. 1 Coach (a one-coat coach varnish)	1.36

VALENTINE'S COACH VARNISHES.



Sizes in stock. Net prices	
quart.	
Wearing Body Varnish (for fin-	
ishing coats only)\$1.50	\$5.75
Elastic Gear Varnish (for finishing running parts) 1.25	4.75
One Coat Coach Varnish (for	4.70
finishing coats on ordinary	
work) 1.15	4.25
One Coat Gear Varnish (for	
finishing running parts, ordinary work)	3.30
Quick Leveling Varnish (two	0.00
day rubbing) 1.00	3.80
Crown Coach Japan (for dry-	
ing and hardening paints)48	1.67

ROUGH STUFFS.

Sizes in stock. Net price. Lawson's, in 5, 10 and 20 lb. pails, per lb..15c Valentine's, in 10 and 20 lb. pails, per lb..22c

NEAL'S CARRIAGE PAINTS.



	Net pr	ices pe	r can.
Colors.	Qt.	Pt.	½ Pt.
Citron Yellow	50c	30c	20c
Vermillion	65c	40c	28c
Acme Wine	50c	30c	20c
Coach Green	50c	30c	20c
Carmine Red	65c	40c	28c
Brewster Green	50c	30c	20c
Raven Coach Black	50c	30c	20c

LUCAS WAGON PAINTS.



Mixed Ready for Use.

	7.T. 4		
	net p	rice per	can.
Colors.	Qt.	½ Gal.	Gal.
Colors. Black	40c	75c	\$1.40
Red	40c	75c	1.40
Yellow	40c	75c	1.40
Green	40c	75c	1.40
NoteThere are no bet	ter Wag	on Pair	ts on
he market than ours.			

PINE TAR.

Sizes. Net price each	½ Pt. 10c	Pt. Qt. 15c 20c	Gal. 50c
	COAL TAR.	√ Gal.	Gal
Net price each			

SHELLAC.

		Net price per can.								
		(Gal.	⅓ Gal.	Ots.	Pts.	½Pts.			
White	Shellac		\$3.00	\$1.70	\$1.00	\$0.55	\$0.30			
Orange	Shellac		2.75	1.60	.85	.50	.30			
O. alige	21100				,00					

ASPHALTUM.

Gallon cans																					
Half gallon																					
Quart cans	• • • • •	٠.	٠	٠	•	٠	٠	٠	 	٠	٠	•	•	٠	•	٠	•	٠	•	•	.45

PUMICE STONE.

	Net price per lb.
Lump Pumice in bulk	10c
Pulverized Pumice in	bulk 5c

WHITE LEAD.

White Lead in Oil, in 12½, 25, 50 and 100 lb. kegsPrices on application.

OILS.

Net price per gallo	าก
Challenge Machinery Prices on applicatio	n.
Eldorado Machinery Prices on applicatio	
Cylinder Machinery Prices on applicatio	n.
Raw Linseed OilPrices on applicatio	n.
Boiled Linseed Oil Prices on applicatio	n.
Lard OilPrices on applicatio	n.
Turpentine	n.
Tapan DryerPrices on application	n.
SeparatorPrices on application	n.

SHERWIN-WILLIAMS LARGE TUBE QUICK DRYING STRIPING COLORS.

Colors in stock. Net price each.
Striping Black
Spanish Carmine30c
Empress Scarlet20c
Iroquois Red20c
Aztec Red20c
Mohawk Red15c
Coach Green15c
Fernleaf Green
Imperial Blue22c
Ultramarine Blue16c
Hoffman Brown15c
Flake White15c
Ivory White15c
Chrome Yellow15c
Yellow Ochre15c
Gold Imitation15c
Japan or Quick Drying Colors.

DRY COLORS.

Net price p	er lb.
Metallic Red	2c
Chrome Green	16c
Venetian Red	
Red Lead	10c
White Lead	12c
American Vermillion	
Yellow Ochre	
Chrome Yellow	
Whiting	3c
Paris Plaster	
Burnt Umber	5c
Raw Umber	5c
Ultramarine Blue	
Lamp Black, 1 lb. papers	15c
Lucasene Vermillion	25c

MATHER'S THOUSAND MILE AXLE



One pint cans, net price each......25c

LE PAGE'S LIQUID GLUE.



Sizes.	Net price each.
Small Bottles	\$0.10
Half pint	
Pints	
Quarts	

SCRAP GLUE.

		Net	price	per 1b.
	Scrap			
Pulverized				15c







Sizes.				N	Tet	price	each.
Shining	Light	Axle	Grease,	1	1b.	Tin	
Cans							\$0.10

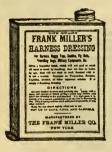
FRANK MILLER'S HARNESS GOODS.

HARNESS SOAP.





Net price each.





							1	N	e	t	p	r	ic	e	e	ach	١.
Pints Dressing																.20	С
Quarts Dressing																	
Half pints Oil .																	
Pinte Oil																95	0



Net price	each.
Pints Axle Oil	200
Quarts Axle Oil	
Half pints Top Dressing	25c
Pints Top Dressing	

NEAL'S CARRIAGE TOP DRESSING.

								N	le	t	p:	r	ice	e	6	each	
Half	pint	cans				 										.200	c
Pint	cans					 										.300	c

TINTED GLOSS PURE OIL LUCAS HOUSE PAINTS.



Sizes in stock.	Net price	each.
	Half	
Gals.	Gals.	Qts.
House Colors\$1.60	\$0.85	\$0.50
Outside White 1.65	.85	.50
Black 1.60	.85	.50
Vermillion	1.25	.70
Window Blind Green	1.25	.70

The Lucas is not a cheap paint, but equal to any made.

CHALLENGE.—We give full measure, eight pints to the gallon.

We challenge a competitive practical test of this paint against any other liquid or mixed paint in the market, wherever manufactured. It is a RECOGNIZED STANDARD for brilliancy, durability, covering capacity and quality.

While experience proves it is impossible to provide against all contingencies governing the application of paint, to produce in every case a perfect or satisfactory result, either where machine or hand-mixed paints are used, we are willing to redress any dissatisfaction that may be properly chargeable to this paint. An assurance of this kind from a house of our responsibility, we think, will commend itself to all purchasers of paint.

LUCAS FLOOR PAINTS.

Net	price	each.
Color. Half	Gals.	Qts.
Yellow\$0.	70	\$0.40
Red	70	.40
Grey	70	.40
Brown	70	.40
Salmon	70	.40
Sage	70	.40
Green	70	.40

CHISEL BRISTLE FLOWING VAR-NISH BRUSHES.



No.	31. Palace	Triple	Thick	White.
Sizes.	Net price ea	ch. Siz	es. Ne	price each.
1 inch	\$0	$.30 \mid 2\frac{1}{2}$	inch	\$0.80
			inch	1.00
9 inch		.60		

BLACK CHISEL BRISTLE FLOWING VARNISH BRUSHES.

No. 43.	Globe Double	Thick.
Sizes. Net price	each. Sizes.	Net price each.
1 inch	.\$0.15 2½ in	ch\$0.50
11/2 inch	25 3 in	ch
2 inch	35	
Note.—All sele		
very soft and ela	astic. Nickel	bound.

CHISEL FLAT BRISTLE VARNISH

CHISEL FLAT BRISTLE VARNISH BRUSHES.



110, 10. 0.	
Double th	ick black
Sizes. Net price each.	Sizes Net price each
Sizes. Net price cach.	Dizes, Itel price edem
1 inch\$0.10	1 9 1/2 inch \$0.25
1 111CH	272 IIICII
1½ inch	1 2 inch 30
1 1/2 IIICII	0 111011
0 1 1 00	
2 inch	

CHISEL BRISTLE FLOWING VARNISH BRUSHES.



No. 57. Ruby Chisel. Double thick white.

	Double time	016 11 111100
1 inch 1½ inch	\$0.20	Sizes. Net price each. 2½ inch\$0.50 3 inch60

ACME CHISELED VARNISH BRUSHES.



No. 65. Chisel.

Sizes.	Net price each.	Sizes. Net price each.
8 inch	\$0.30	14 inch\$0.70
9 inch		16 inch
10 inch		18 inch
12 inch		

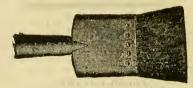
EXTRA CAMEL HAIR MOTTLING BRUSHES.



No. 309. Square.

Sizes.	Net price each.	Sizes. Net price each.
1 inch	\$0.15	2 inch\$0.30 2½ inch40
1½ inch		2½ inch

FITCH HAIR FLOWING BRUSHES.



No. 318. Single Thick Chisel.

Sizes.	Net price each.	Sizes. Net	price each.
1 inch	\$0.30 40	2 inch	\$0.50
1½ inch		2½ inch	60

SINGLE THICK BADGER HAIR FLOWING BRUSHES.



No. 325. Chisel,

Sizes.	Net price each.	Sizes.	Net price each.
1 in ah	\$0.30	2 inc	h\$0.60
1½ inch		2 ½ inc	ch79

SASH TOOLS.



No 957 Extra French.

	140. 201. 132	iti di Titorican
1 inch 2 inch	\$0.06	Sizes. Net price each. 4 inch\$0.12 6 inch
1 inch 3 inch	Net price each.	Sizes. Net price each. 7 inch\$0.20 9 inch\$25

CAMEL HAIR DAGGER STRIPERS.



No. 287.

CAMEL HAIR LETTERING AND STRIPING PENCILS IN QUILLS.



No. 283. Rose,	
Sizes.	Net price each.
1 to 8, Lettering	\$0.05
Assorted, per doz	45
No. 284. Rose.	
1 to 8, Striping Points	\$0.05
Assorted, per doz	45

COLOR BRUSHES.



No. 312. Extra Camel Hair.

Net price each. | Sizes. Net price each.

1 inch\$0.35 | 2 inch\$0.70

1½ inch\$0 | 2½ inch\$1.00

COACH DUSTERS.



FLAT PAINT OR WALL BRUSHES. No. 95 Klondike.

Size, inches 3	3 1/2	4
Net price each\$0.25	.30	.35
No. 92 Hankon,		
Size, inches 3	31/2	4
Net price each\$0.40	.50	.60
No. 81 Acme.		
Size, inches 3	3 1/2	4
Net price each\$0.70	. 85	1.00
Net price each\$0.70	.85	1.00

JENNINGS' WAGON MAKERS' DRAW KNIVES.



Sizes.																eac	
8 i1																\$0.8	
9 i1 10 i1																	-

BARTON'S No. 87 NARROW CAR-RIAGE KNIVES.



Sizes.	111		orice each.
8 inch		 	\$0.95
9 inch		 	1.10
10 inch		 	1.15
	3/4 to 1 in	applewoo	d handles,
capped as	nd ferruled		

BARTON'S No. 88 WAGON MAKERS' KNIVES.



 Sizes.
 Net price each.

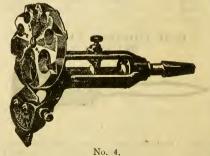
 8 inch
 \$0.98

 9 inch
 1.10

 10 inch
 1.12

 Heavy blades, 1¼ to 1¾ inch wide, black walnut handles, capped.

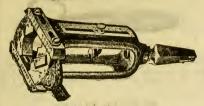
BONNEY ADJUSTABLE HOLLOW AUGER.



Cuts from 3/8 to 1 inch.

Net	price	each	\$0.60

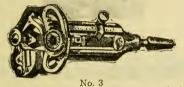
STEARNS' PATENT ADJUSTABLE HOLLOW AUGER.



The Jaws slide toward and from each other, and may be adjusted to any size from ¼ to 1¼ inches to the scale upon head of tool. They are hardened steel and are secured by screws working in the slots at side of cutter head. The adjustable stop and graduated scale upon body regulate the length of tenon. No. 0

Net price each.\$3.00 No. 0

STEARNS' PATENT ADJUSTABLE HOLLOW AUGER.



Cuts any size tenon from ½ to 1½ inches, and pivoted paws are provided with a graduated scale by which the size of the tenon is regulated. To secure required length of tenon a movable stop is operated upon a graduated scale with rulings to sixteenths.

SARGENT'S ADJUSTABLE HOLLOW AUGER.

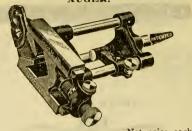


No. 50.

This Auger is made of malleable iron and steel, and the jaws are moved by means of right and left hand screw. It will cut any size tenon from ½ to 1½ inches, and may be instantly adjusted. Length of tenon regulated by the adjustable stop and graduated scale.

Net price each. No. 50\$3.90

WOOD'S "UNIVERSAL" HOLLOW AUGER.



Net price each.\$3.75

It cuts a tenon of any size from ¼ in. up to 1¼ in., and any length up to 4 in. Knife is adjustable to cut any desired thickness of chip without changing set of Auger as to size of

ADJUSTMENT.

A simple turn of the large thumb-screw makes complete adjustment for any size of tenon. Just the work of a second, without the use of any tool, and the Auger is set to any size by the gauge, with absolute accuracy, or to suit the size of the bit being used. There is no "cutting and trying." The adjustment is made exactly, and practically instantaneously. The Adjusting Screw has right and left threads, which causes the V-Block and the Knife to move toward or away from the center of the Auger, so that the tenon being cut is always central of the Auger.

STEARNS' SPOKE POINTERS.



With Graduated Adjustable Shank. Net price each. No. 1, Points up to 11/8 inches diameter...55c No. 2, Points up to 25/8 inches diameter...75c

GOODELL'S HACK SAWS.



Sizes. Net price each.
No. 8, for 8 inch blade, solid steel.......37c
No. 9, for 9 inch blade, solid steel......41c

STAR HACK SAW FRAME.



This is the best Extension Frame in the market. It is light and quickly adjusted, having strength in the middle where strength is needed. It is made of tempered steel, polished and nickel plated. The handles are Cocobola wood, highly finished. It carries blades 6 to 12 inches long.

Net price each Net price each.

No. 9, Star Hack Saw Frame.....\$1.00

HACK SAW BLADES.

			Net price
Size	es	Do	oz. Each.
8	inch	\$0	49 \$0.05
	inch		.53 .06
	inch		.64 .07 .79 .08
12	inch		.79 .00

SPOKE SHAVES.



No. 1, Single, 134 inch Cutter......\$0.15



No. 2. Net price each.
No. 2, Double 134 inch Cutter, concave and straight\$0.25

HERWOOD SCREW DRIVERS.



Hardwood Irandle.

Sizes.	Net price each.	Sizes.	Net price each.
	. blade \$0.18		
	. blade20		
4 in	. blade25	10 in.	blade60
5 in	. blade		

The best Screw Driver made.

BRACE SCREW DRIVER BITS.



 Sizes.
 Net price each.

 3% inch wide
 \$0.10

 1/2 inch wide
 .10

 ½ inch wide
 .10

 Special steel, very strong.

FILE CLEANER.



Net price, each\$0.08

ADJUSTABLE STEEL COUNTER-SINK.



For Wood Only.

Net price each. Without Bits ..., \$0.35

TINNERS' SNIPS.



Sizes. Net price each.
No. 9, Length of cut 3 inches......\$1.10
No. 8, Length of cut 3½ inches...... 1.25

BUTTON'S PLIERS.



 Sizes.
 Net price each.
 Sizes.
 Net price each.

 4½ inch
 \$0.20
 8 inch
 \$0.30

 6 inch
 .25
 10 inch
 .35

BENCH STOP. .



SCREW CLAMPS.



 Sizes.
 Net price each
 Sizes.
 Net price each

 2½ in.
 opening...\$0.10
 7 in. opening...\$0.32

 3 in.
 opening... .12
 8 in. opening... .37

 4 in.
 opening... .17
 10 in. opening... .45

 5 in.
 opening... .20
 12 in. opening... .55

SNOW'S PATENT ADJUSTABLE CLAMPS.



 Sizes.
 Net price each
 Sizes.
 Net price each

 2 in.
 opening...\$0.40
 6 in.
 opening...\$0.70

 3 in.
 opening....\$0
 7 in.
 opening....\$0

 4 in.
 opening...
 50
 8 in.
 opening....\$0

 5 in.
 opening...
 ...
 ...

A spring lever on the side permits of the instant adjustment of this clamp without turning the screw except to tighten the hold.

PERFECTION CLAMP.

Sizes.	Net price each.
3-foot Clamps	
4-foot Clamps	
5-foot Clamps	

Note,—These Clamps are all made of malleable iron parts, wrought iron screws and steel bars.

CLARK'S EXPANSION BITS.



Sizes.			Net	price each.
				\$0.60

AUGERS.

Sizes.	Net price ea	ach. Sizes	s. Net price each.
1/2 inc	h \$	0.21 11/8	inch\$0.38
5/8 inc	lı	.23 11/4	inch
34 inc	h	.25 11/2	inch53
78 inc	lı	.30 13/4	inch65
1 inc	h	.34 2	inch76

SNELL'S CAR BITS.

-ceeeeeeeee

Sizes.	Net price each.	Sizes.	Not price each.
	\$0.33		
38 inch		78 inch	
36 inch			

PRATT'S PATENT AUGER HANDLES.



Size	s.						Ne	t	pr.	ice	each.
No.	1,	14	inches	long	 		 				.\$0.60
No.	2,	17	inches	long	 		 		٠.	٠.	75

JENNINGS' AUGER BITS.

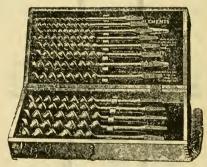
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Jennings' Pattern.	Jennings' Genuine.
Sizes. Net price each.	Sizes. Net price each.
16 inch\$0.17	18 inch\$0.20
1/4 inch	1/4 inch
$_{16}^{5}$ inch	16 inch
3% inch	3/8 inch
15 inch	16 inch
½ inch	½ inch
16 inch	16 inch
5% inch	5/8 inch
} inch	} inch
3/4 inch	34 inch
13 inch	1 1 inch45
7/8 inch	7/8 inch
15 inch40	$\begin{cases} \frac{1}{6} & \text{inch} & \dots \end{cases}$.52
1 inch	1 inch
IDWIN AT	GIER RIPS

The state of the s

671.5			
Sizes.	Net price each.	Sizes.	Net price each.
1/4 inch	\$0.20	14 inch	\$0.35
inch inch		3/4 inch	
16 inch		1 inch	45
58 inch			

AUGER BITS IN SETS.



Packed in a Wooden Case. In sets consisting of one bit each. 1/4, 1/6, 1/

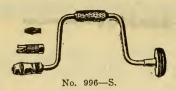
		per set.
Jennings' Pattern	 	\$3.25
Russell Jennings	 	4.50
Irwin		

PLUG CUTTER.



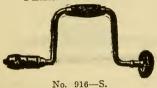
Sizes.													N	Į,	21	I) 1	i	c	c	ea	c	h	
1/2 incl																								
incl	1 .																					.:	3.	5
% incl	1.					į.																.4	4	0

BIT BRACES.



Sizes.		Net pric	e each
10 inch 12 inch	sweep sweep	 	\$0.35

PLAIN BIT BRACE.



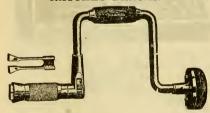
Size	es.		Net pric	e each.
14	inch	sweep		\$1.25
12	inch	sweep		1.19
10	inch	sweep		1.00

RATCHET BIT BRACE.



Size	es.	No. 915—S Net price each.
14	inch	sweep\$1.25
12	inch	sweep 1.15
10	inch	sweep 1.00

RATCHET BRACES.



Both Jaws and Sleeve are made of Solid Steel.

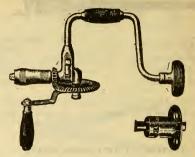
Sizes.			Net p	rice each.
No. 1002,	10 ir	ch sweep		\$1.60
No. 1001,	12 in	nch sweep		1.80
No. 1000,	14 ir	ich sweep		1.90

SPOFFORD'S BRACES.

Size.	Each.	Size.	Each
8 inch	sweep\$0.85	14 inch	sweep\$1.15
12 inch	sweep 1.05	17 inch	sweep 1.25

DRILL BRACE WITH BALL

BEARINGS.



This is a 10-inch sweep Ratchet Brace with Gear Wheels speeded about three to one; to be used for drilling. The Gear Wheel can be removed when not wanted. The Crank Handle, as shown in the cut, can be extended to gain more power when needed. The Chuck will hold Round or Square Shanks.

Net price, each.....\$2.50

GOODELL REVERSIBLE AUTOMATIC

INTERCHANGEABLE SCREW

DRIVER.



No. 22\$1.15

It drives and draws screws automatically. Has two separate and distinct spirals. Comes with three bits.

DRILL ATTACHMENTS FOR GOOD-ELL AUTOMATIC SCREW DRIVER.

No. 2, Fitting No. 22 Aut. Screw-driver.\$0.50

Consists of chuck and eight fluted drill points to be used with automatic screw-driver so as to turn it into a drill chuck same as in automatic drills.

YANKEE RECIPROCATING SCREW DRIVER.



Net price each. \$1.25

Three bits with each tool. Right and left hand spiral ratchet with locking device for holding rigid.

IRON AND STEEL SQUARES.

							THE PERSON NAMED IN	
I F		חממו	mnai		hali	HH		
)	Descr	iptic	n,		
				Bod	-		Ton	gue.
	No.	1.		24x2	in.		16x1	1/2 in.
	No.	2.	. :	24x2	in.		16x1	½ in.
	No.	3.	:	24x2	in.		16x1	½ in.
	No.	14	. :	24x2	in.		16x1	½ in.
	No.	1.	(Coppe	ered		16x1	½ in.
	No.	2.		Сорр	ered		16x1	½ in.
	Size	s.			1	Net	price	each.
	No.	1,	Cast	Stee	1, 2	in.		\$1.00
	No.	2,	Cast	Stee	1, 2	in.		1.00
	No.	3,	Cast	Stee	1, 2	in.		.70
	No.	14,	Cast	Stee	1, 2	in.		.60
	No.	1,	Cop	pered	l			1.40
	No.	2,	Cop	pere	1			1.30
				IR	ON.			

VANKEE RECIPROCATING DRILL.

No. 1, Iron, 1½ in........\$0.30



No. 50.

SLIDING "T" BEVELS.



								-	0.	00											
Siz	es.													N	et	17	ri	ic€	: 6	ach.	
6	inch									 									. \$	0.13	
8	inch																		. '	.21	
10	inch									 										.22	
	inch																				
	Γhe	Be	ve	1	В	lac	đe	С	an	he	i.	m	ad	e	f	351	t	or	- 1	oose	
	mor																				

hand which grasps the handle, thus leaving the other hand of the workman free.

MARKING GAUGES.



Sizes. Net price each.
No. 62, Marking Gauge.......\$0.10
Beechwood, steel point.



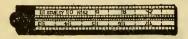


TWO SPEED BORING MACHINE. Best quality.

BOXWOOD RULES.

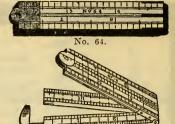


No. 68.



No. 62.

BOXWOOD RULES.



No. 32.

DESCRIPTION OF STANLEY RULE AND LEVEL CO.'S RULES

	DESC	TITE	TION O	I STANDEL ROBE AND BEYER CO. 5 ROBES.
	Width.			Net price each.
64	1 ft. 5/8 in	. 4	Square	No binding on edge 8th and 16th
				Full brass bound 8th and 16th35c
				No binding on edge 8th, 10th, 12th and 16th35c
32 1/2	1 ft. 1 in	. 4	Arch	Full brass bound 8th, 10th, 12th and 16th40c
68	2 ft. 1 in	. 4	Round	No binding on edge 8th and 16th10c
63	2 ft. 1 in	. 4	Square	No binding on edge 8th, 10th, 12th and 16th18c
62	2 ft. 1 in	. 4	Square	Bound 8th, 10th, 12th and 16th35c
54				Full brass bound 8th, 10th, 12th and 16th, drafting scale 40c

ZIG-ZAG RULES.

Sizes.	Net	price	each.
No. 4, Four-foot length			30c
No. 6, Six-foot length			40c
Note.—Any of above Rules	can	be se	nt by
mail. Postage from 4 to 8 cer	its ex	tra.	

DISSTON'S COMPASS SAWS.



BACK SAWS.

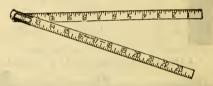


	es.											1	V	c	t		D	ri	c	e	ea	c	h.
10	inch																٠.				\$0	1.8	30
12	inch															ı					•	. 9	0
14	inch													ì							1	.2	0

BROWN HAND SAWS.

Sizes.		Net price each,
20 inch		
26 inch	Rip	1.05

BLACKSMITHS' RULE.



This rule consists of two legs made from spring brass joined together by a brass joint, is particularly adapted for measuring hot metal, as it can be cooled by plunging in water without rusting.

DISSTON'S HAND SAWS.



No. 7.

Size	s.								N	le	t	p	r	ic	e	each.	
																\$1.35	
No.	7,	28	inch	Rip.	٠.			٠				٠.				1.55	



No. D 8.

Size	s.			Net price each.
				\$1.26
				1.40
				1.58
No.	D 8,	28	inch	Rip 1.80

Note.—We carry a full line of Disston's Saws of all kinds.

BUCK BROS. SOCKET FIRMER CHISELS.



 Sizes
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 Buck Bros.
 \$0.55.58.65.68.75.80

 Leather Tipped Bevel Edge Clearcut
 44.46.49.52.55.58

BUCK BROS. SOCKET FRAMING CHISELS.



Sizes 5% 34 1 1½ 1½ 1¾ 2 Buck Bros. ..\$0.70 .75 .80 .85 .90 .95 1.10

SOCKET FIRMER GOUGES.



 Sizes
 y/s
 y/s</

BUCK'S TURNING CHISELS.



Sizes ... ½ ¾ 1 1¼ 1½ Buck's ... \$0.30 .35 .43 .55 .65

CORNER CHISELS.



AUTOMATIC BORING TOOLS.



Points\$1.05

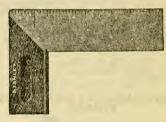
TRY SQUARES.



No. 20.

Size Blades, inches 4½ 6 7½ 9 10 12 Net price, each....\$0.20 .25 .30 .35 .40 .45

COMBINED TRY AND MITRE SQUARES.



Size Blades, inches.... 4½ 6 7½ 9 12 Net price, cach......\$0.30 .35 .40 .45 .50

Square inside and out. Blades graduated in inches. The handles of these Try Squares have a brass face firmly riveted in position and also the Handy Grip.

PLATFORM SCALES.



Sizes	Capacity	Platform	Net price each.
P 6	600 lbs.	17x25 in.	\$ 8.00
P 8	800 lbs.	18x26 in.	9.25
P10	1000 lbs.	19x26 in.	10.00

GENUINE BAILEY'S ADJUSTABLE BLOCK PLANES.



Nos. 110, 120.



Nos. 91/2, 93/4, 15, 16.

21001 - 721 - 741 1	
izes. Net price ear	
No. 110, 7½ in. long, 1¾ in. Cutter\$0.	40
Vo. 120, Adjustable, 7½ in., 1¾ in.	
	52
Vo. 91/2, 6 in. long, 13/4 in. Cutter	76
lo. 934, Rosewood Handle, 6 in., 134 in.	
	95
	95
Io. 16. Nickel Trimmings, 6 in., 134	
in. Cutter	95

GENUINE BAILEY'S PATENT SMOOTH PLANES.

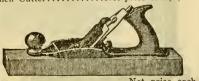


Size	s.					N	Net price	each.
No.	1,	5 1/2	inches	long,	11/4	inch	Cutter	\$1.15
No.		7	inches	long,	15/8	inch	Cutter	1.45
No.	3,	8	inches	long,	13/4	inch	Cutter	1.50
No.	4.	9	inches	long.	2	inch	Cutter	1,75

GENUINE BAILEY'S WOOD PLANES.



No. 35, Handle smooth, 9 inches long, 2 inch Cutter......Net price each, \$1.25



 Sizes.
 Net price each.

 No. 26, Jack Plane, 15 inches long, 2 inch Cutter
 \$1.10

 No. 28, Fore Plane, 18 inches long, 2½ inch Cutter
 1.40

 No. 29, Fore Plane, 20 inches long, 2¾ inch Cutter
 1.40

 No. 30, Jointer Plane, 22 inches long, 2¾ inch Cutter
 1.50

 No. 33, Jointer Plane, 28 inches long, 2¾ inch Cutter
 1.65

PLANE IRONS FOR WOOD PLANES.



Single.

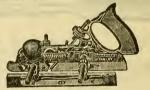
Sizes, inches..... 2 2½ 2½ 2¾ 2¾ 2½ 25½ 2¾ Net price, each...\$0.24 .25 .28 .30 .35 .38 .40 Double.

Double.
Sizes, inches..... 2 2½ 2½ 2½ 2½ 25 2¾
Net price, each...\$0.49 .50 .53 .55 .62 .70 .75

GENUINE BAILEY'S JACK AND JOINTER PLANES.



PATENT ADJUSTABLE BEADING. RABBET AND SLITTING PLANE.



This Plane embraces (1) Beading and Center Beading Plane; (2) Rabbet and Filletster; (3) Dado; (4) Plow; (5) Matching Plane: (6) Sash Plane; and (7) a superior Slitting Plane.

ADJUSTABLE CIRCULAR PLANE.



No. 113. Adjustable Circular 1¾ inch Gutter, Net price each.....\$2.25

Note.—This Plane has a flexible steel face which can be easily shaped to any required arc, eithes concave or convex, by turning the knob on the front of the Plane.

WING DIVIDERS.

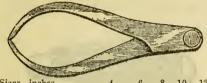


INSIDE CALIPERS.



Sizes, inches 4 6 8 10 12 Net price, each.....\$0.12 .15 .20 .25 .30

OUTSIDE CALIPERS.



Sizes, inches 4 6 8 10 12 Net price, each.....\$0.12 .15 .20 .25 .30

PLAIN SCRATCH AWL.



Net price each\$0.10

SOCKET SCRATCH AWL.



Polished Cast Steel, 6 inches long.....\$0.15

COLORED LUMBER PENCILS.



 Color
 Net price per doz.

 Black
 \$0.70

 Red
 .90

 Blue
 70

BLACKSMITH'S CRAYONS.



MALLETS.



Square.

THE IDEAL MALLET.



Sizes. Net price, each.\$1ron, wood faced, weight 3 libs.......\$0.25

POCKET LEVELS.



Sizes. Net price each. No. 41, Iron with Brass Top Plate.....\$0.12

MACHINIST'S IRON LEVELS.



 Sizes.
 Net price each.

 No. 38½, Iron Level, nickel plated, 4 in. long
 \$0.35

 No. 39½, Iron Level, nickel plated, 6 in. long
 40

LEVELS.



No. 102.

Sizes. Net price each.
No. 102, Arch Top Plate, 10 to 16 in....\$0.30
No. 103, Arch Top Plate, 18 to 24 in.... .40
Two side views.

PLUMBS AND LEVELS.



No. 104 and 00.

Net price each. Sizcs. No. 104, Arch Top Plate, two side views, No. 00, Arch Top Plate, two side views, 18 to 24 in.



No. 3.

Net price each. No. 3, Patent Adjustable Plumb and Level Arch Top Plate two side views, polished and tipped, 24 to 30 inches.. \$0.90



Style of Nos. 5 and 9.

Net price each. No. 5, Patent Adjustable Plumb and Level, Triple Stock, Arch Top Plate, two ornamental brass tipped side views, polished and tipped, 24 to 30 inches..\$1.20

No. 9, Patent Adjustable Mahogany Plumb and Level, Arch Top Plate, two ornamental brass tipped side views, polished and tipped, 24 to 30 inches..... 1.50



Style of Nos. 25 and 30.

Net price each. No. 25, Patent Adjustable Plumb and Level, Mahogany, Arch Top Plate, improved duplex side views, polished and tipped, 24 to 30 inches.....\$1.60 No. 30, Patent Adjustable Plumb and Level, Cherry, Arch Top Plate, improved duplex side views, polished and tipped, 24 to 30 inches...... 1.25

POCKET KNIVES.



No. A. 12 to 18 in.\$0.40 No. A-2 Blades, wood handle......\$0.25



No. B. No. B-2 Blades, smooth handle.....\$0.50



No. C. Each. No. C--2 Blades, stag handle.....\$0.50



No. D. No. D-2 Blades, stag handle.....\$0.75



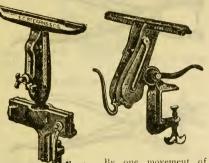
No. E. Each. No. E-3 Blades, stag handle.....\$1.00



Pearl.

2 Blades, each.....\$0.95

STEARNS' SI-STEARNS' No. 5 SAW VISES. LENT SAW VISIES.



Ball and socket, can hold at any angle.

Net price Sizes. each. No. 5, Jaw, 91/2 inches ...\$0.70 By one movement of the lever the saw is firmly clamped, after which a third jaw, faced with a solid rubber, is pressed against the saw, preventing noise and vibration; has patent ball and socket joint allowing favorable adjustment to tighten.

Sizes. Net price each. No. 33, 10 inch planed jaws\$0.90

FARM BELLS.



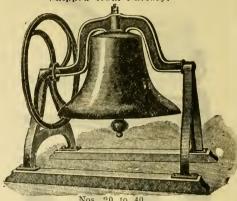
Nos. 1 to 3-FARM BELL.



No. 4-FARM BELL.

No. List.	Diameter inches.	Weight lbs.	Net price each.
1	15	40	\$1.60
2	17	50	2.00
3	19	75	2.50
4	21	100	3.50

SCHOOL AND CHURCH BELLS. Shipped from Factory.



Lis	t No.	Weight of Bell	Net
and	Diam.	and mounting	price
in	inches.	in lbs.	each.
	20	165	\$ 6.65
	22	205	8.20
SCHOOL .	24	250	10.00
BELLS.	26	350	16.15
	28	450	19.00
	(30	570	25.25
	32	640	28.50
	34	765	35,00
CHURCH	36	950	42.75
BELLS.	38	1.010	48.50
	40	1,300	57.00
	44	1,740	75.00
	48	2.280	95.00

Bells are numbered by the diameter in inches. The weight and prices named are for Bells and Mountings complete as illustrated on this page.

All sizes of our School and Church Bells, except Nos. 20 and 22, have springs.

The superior quality of Bell Metal used in the Fredericktown Bell creates a volume of sound and purity of tone unexcelled. There is no uncertainty as to its merits. We can give no stronger proof than to call your attention to the fact that they have been in use and have given good satisfaction for over one-half a century

Strength, durability in all climates, great volume of sound and purity of tone and the great distance at which they can be heard, is world-wide reputation.

All of our Bells are enameled with a rich copper bronze, which protects them from the air and weather. The hangings are wrought and cast iron, extra strong, finished with black enamel.

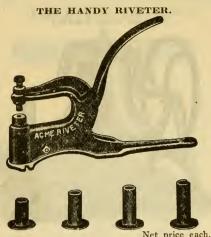
HALF SOLES AND TOP LIFTS.



Bonanza

Net price per doz. pair.

Half Soles\$2.00 Top Lifts 8 in. Howard Strips, 12 in. to 20 in. long,



Handy Riveter with Rivets\$0.40
Rivets, assorted, per box........08

Note.—A box of 50 assorted rivets is furnished with each machine. The work is done complete with one stroke of the lever.

COPPER RIVETS AND BURRS.



 Sizes.
 Net price in 1 lb. boxes.

 No. 8, ¼, ¼, ¾, ½, ¾, ¾ and 1 in.
 1 song

 long
 ...
 \$0.38

 No. 10, same length as above.
 .38

 Sizes.
 Net price in ½ lb. boxes.

 No. 8, Assorted, ¾ to ¾.
 \$0.23

 No. 10, Assorted, ¾ ta ¾.
 ...

BLAKE'S BELT STUDS.



Sizes					Net	price	per 100
No.	00,	Length	11/2	inch			\$1.25
No.	0,	Length	1 18	inch			1.00
No.	1,	Length	1	inch			85
No.	2,	Length	7/8	inch			65
No.	3,	Length	3/4	inch			45
No.	4,	Length	18	inch			40
No.	5,	Length	5/8	inch			35
No.	6,	Length	3/4	inch			30

BELT HOOKS.



	Net price pe	er doz.	Net	price	per	doz
No	19	\$0.03	No. 6.		3	50.07
No	. 11	03	No. 5.			.07
NT-	. 10	03	No 4			.08
		03	No. 3.			.08
	. 9		No. 2.			10
No	. 8		NO. ~.			10
No	7	06	10. 1.			.11

SPRING PUNCHES.



REVOLVING PUNCHES.



Net price each.
Revolving Punches, 4 holes......\$0.45

BELT FASTENERS.



Sizes.			Net price per lb.
7 in.	wide,	7 in.	deep\$0.25
			deep
1½ in.	wide.	7/8 in.	deep

BEVEL CLINCH RIVETS.



Sizes. Net price per box Assorted ¼ to ¼ inch, 100 in a box....\$0.10

BABBIT METAL.



Nos. 1, 2, 3, 4 and Extra, Genuine, Palmetto. Prices quoted on application.

Sizes.

SAND PAPER.



Sizes. Net price per quire. Nos. 00, 0, ½, 1, 1½, 2, 2½, 3.....\$0.20

EMERY PAPER.

Sizes. Net price per quire. Nos. 00, 0, ½, 1, 1½.....\$0.30

EMERY CLOTH.

Net price per quire. Nos. 00, 0, ½, 1, 1½......\$1.00

POWDERED EMERY.

Net price per lb. Nos. Flour, 70, 80, 90, 100.....\$0.12

WASHITA OIL STONES.



Net price per lb......\$0.40

WASHITA OIL SLIPS.



Net price each..... ...\$0.20

THE GENUINE DEERLICK OIL · STONES.



Razor Edge Grit, Fast Cutting. Net price per 1b. Standard Size, 8 x 2 x 7/8 to 11/8 inches. \$0.35

SOLID EMERY OIL STONES.

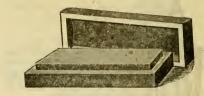


Net price each. 8 x 2 x 1, weight about 26 ounces.....\$0.35 Two grades of these stones are made; one for putting on a rough edge and one for a cutting edge on fine tools.

HINDOSTAN OIL STONES.

Net price per lb......\$0.10

THE DEERLICK OIL STONE MOUNTED.



Polished Mahogany Cases. Net price each.

They are more uniform in quality than other stones. They are a natural grit from American quarries, sharp and fast cutting, being equally effective whether used with oil or water only.

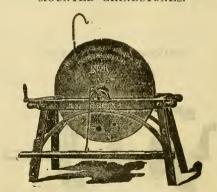
GRINDSTONES.



Unmounted

	es.					e per 100 lbs.	
20	in.	diameter,	weight	about	65	lbs\$1.50	
24	in.	diameter,	weight	about	100	lbs 1.50	
28	in.	diameter,	weight	about	140	lbs 1.50	
30	in.	diameter,	weight	about	160	lbs 1.50	

MOUNTED GRINDSTONES.



Sizes.			Net price each.
Sampson	No.	1	\$3.50
Sampson	No.	2	3.35
Sampson	No.	3	3.20

BURR STEEL SAFETY LIFT.



These lifts are automatic and adjustable, made of best selected steel. They are positive in action and sustain the load at any point. Will lock securely on wet or greasy rope. With this lift one man can easily do the work of two.

Directions .- To lower load when lower block is out of reach, grasp the hoisting rope securely before pulling on the trip rope. Hold rear end of lever down by pulling on the trip rope and allow the hoisting rope to slip back through the other hand. To lower load when lower block can be reached, pull down upon part of rope passing between block and central sheave in upper block. Easily adjusted.

Net

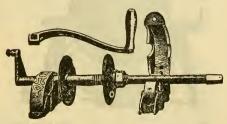
shaft.

					TAGE
				Capacity,	price
No.	For Rope.	Wei	ght.	Pound.	each.
2	1/4 in.	22	oz.	600	\$0.55
3	3/8 in.	4 1/8	lbs.	800	.85
4	½ in.	6 1/2	lbs.	1500	1.50
5	5/8 in.	11	lbs.	2000	1.95
6	3/4 in.	17	lbs.	2500	2.40
4 1/2	1/2 in.	10	lbs.	3000	2.85
51/2	5/8 in.	20	1bs.	3500	3.35
6 1/2	3/4 in.	28	lbs.	5000	3.95

The above prices include lower block, BUT NO ROPE.

GRINDSTONE FIXTURES.

Heavy.



UNION GRINDER.

No. 1.

UNION GRINDER.



EMERY WHEELS.



			Net	price	each.	
Th	ickn	ess 1/4	25	3/8	1/2	5/8 in.
6	in.	diam\$0.42	\$0.48	\$0.48	\$0.53	\$0.65
8	in.	diam63	.70	.70	.78	.93
		diam ,90	.95	1.00	1.00	1.30
12	in.	diam., 1.10	1.15	1.20	1.20	1.50
14	in.	diam., 1.80	1.85	1.90	1.90	2.25
			Net	price	each.	
Th	ickn	.ess 3/4	1	1 1/4	11/2	2 in.
		ess 34 diam\$0.75	$^{1}_{\$0.95}$		1½ \$1.75	2 in. \$2.00
6	in.		\$0.95	\$1.10		\$2.00
8	in.	diam\$0.75	\$0.95 1.35	\$1.10 1.70	\$1.75	\$2.00
$\begin{array}{c} 6 \\ 8 \\ 10 \end{array}$	in. in. in.	diam \$0.75 diam 1.08	\$0.95 1.35 1.71	\$1.10 1.70	\$1.75 2.25	$\frac{$2.00}{2.50}$
$ \begin{array}{r} 6 \\ 8 \\ 10 \\ 12 \end{array} $	in. in. in. in.	diam \$0.75 diam 1.08 diam 1.50	\$0.95 1.35 1.71	\$1.10 1.70 2.08	\$1.75 2.25 2.44 2.89	$\begin{array}{c} \$2.00 \\ 2.50 \\ 3.25 \end{array}$
6 8 10 12 14	in. in. in. in. in.	diam \$0.75 diam 1.08 diam 1.50 diam 1.62	\$0.95 1.35 1.71 2.00	\$1.10 1.70 2.08 2.43	\$1.75 2.25 2.44 2.89	\$2.00 2.50 3.25 3.75

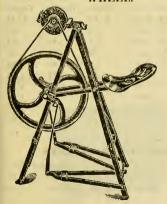
EMERY WHEEL DRESSER.



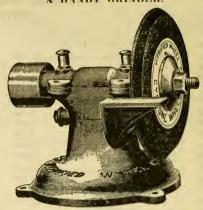
SCHOFIELD'S BI-TREADLE EMERY

WHEEL.

Is Warranted to



A HANDY GRINDER.



Specially Adapted for Saw Gumming.
Will carry an Emery Wheel of any size up
to 10 inches in diameter, 1½ in. thick. Weight
36 pounds. Has Babbitted Bearings 8 inches
long. Adjustable Side Rest. Self-feeding Oil
Cups.

ROPE.



	Sizes.	SISAL.	Net price	per lb.
	1/4 and 15 3/4 and 3/4	in. diameter in. diameter larger	. 	12c
		MANILA		
•	Sizes.		Net price	per lb.

Net price per 1b......10c

Spun Oakum, best quality......10c

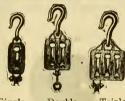
WOOD SPLIT PULLEYS.

WIDTH OF FACE.

				WIDI	ii or raci	٥.			
Diam.								The same	
in	3	4	5	6	8	10	12	. 14	16
4	\$1.06	\$1.10	\$1.18						
5	1.08	1.12	1.22	\$1.29					
6 .	1.10	1.14	1.24	1.33				. •	
7	1.12	1.16	1.27	1.37	\$1.58		,		
8	1.14	1.18	1.29	1.42	1.64		. 4		
9	1.18	1.24	1.36	1.48	1.73	\$1.98			
10	1.24	1.29	1.43	1.56	1.82	2.09	\$2.36		
12	1.43	1.52	1.69	1.86	2.20	2.55	2.89		
14		1.75		2.17	2.58	3.00	3.42		
16		1.98		2.47	2.96	3.46	3.95		
18		2.20		2.77	3.34	3.91	4.48		
20		2.43		3.08	3.72	4.37	5.02		
22		2.66		3.38	4.10	4.83	5.55	\$6.27	
24		2.93		3.76	4.70	5.43	6.27	7.11	\$7.94
28		*****				6.65	7.71	8.78	9.84
32						7.87	9.16	10.45	11.74
36						9.16	10.68	12.20	13.72

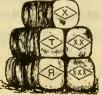
CAN FURNISH OTHER SIZES.

PRICES ON APPLICATION.



		Single.		Double.		TL	I ripie.		
						Ne	t pric	e e	ach.
Si	hell.	Ro	pe.	Si	ingle.	Do	uble.	Tri	iple.
3	inch,	3/8	inch.	\$.25	\$.40	\$.60
4	inch,	1/2	inch.		.28		.50		.65
5	inch,	5/8	inch.		.30		.55		.70
6	inch,	3/4	inch.		.35		.60		.90
7	inch,	7/8	inch.		.40		.75		1.05
8	inch,	1	inch.		.50		.85		1.25
10	inch,	11/8	inch.		.80		1.35		1.90
12	inch,	11/4	inch.		1.35		2.25	;	3.00
14	inch,	13/8	inch.		2.10		3.00		4.00
15	inch,	11/2	inch.		2.40		3.90		5.00

COTTON WASTE.



WOOD PULLEY BLOCKS. STEEL PULLEY BLOCKS.



	-117	Sing	le. I	Doul	ble.	Tri	ple.	1003 0
						Ne	t pric	e each.
SI	hell.	Ro	pe.	S	ingle.	Do	uble.	Triple.
3	inch,	3/8	inch		\$.19	\$.35	\$.48
4	inch,	1/2	inch		.23		.43	.58
5	inch,	5/8	inch		.24		.48	.61
6	inch,	3/4	inch		.30		.54	.78
7	inch,	7/8	inch		.35		.65	.95
8	inch,	1	inch		.45		.77	1.15
9	inch,	11/8	inch		.80	1	.20	1.50
10	inch,	11/4	inch		1.00	1	1.35	1.90
12	inch,	13/8	inch		1.35	2	2.25	3.00
14	inch,	11/2	inch		2.10	5	3.00	4.00

	SHEAVES FOR PULLEYS.
	Sizes. Net price each.
	3 inch size of block, 21/4 in. diameter\$.10
	4 inch size of block, 21/4 in. diameter10
	5 inch size of block, 23/4 in. diameter12
The report of	6 inch size of block, 31/4 in. diameter15
	7 inch size of block, 41/4 in. diameter20
	8 inch size of block, 5 in. diameter25
	10 inch size of block, 61/4 in. diameter40
Net price per lb.	12 inch size of block, 71/2 in. diameter60
White Cotton Waste10c	14 inch size of block, 81/2 in. diameter75

RUBBER HOSE.



STANDARD WATER HOSE.

Size	s.	Net price per foot.
		\$0.12
~	111 C11	

EXTRA QUALITY WATER HOSE.

Sizes	S.								N	Te	et	p	ri	c	е	1) (21	•	foot.	
																				\$0.12	
																				.15	
																				.25	

GUARANTEED WATER HOSE.

3/4	inch,	net	price	per	foot\$0.20
-----	-------	-----	-------	-----	------------

GENUINE STEAM HOSE.

Size	s.																		1	N	e	t	r	r	ic	e	1	ре	r		foot.	
	inch																															
	inch																															
11/4	inch	٠	•	٠	•	٠	٠	٠	٠	•	٠	•	٠	٠	٠	٠	•	•	•	٠	٠	٠	٠	•		•	٠	٠	•	•	.55	

RUBBER LINED COTTON WATER HOSE.



Siz	es.		Net	price	per	foot.
3/4	inch	Standard (Cotton			\$0.12
3/4	inch	Best Qual	ity Cotton	,		.14

We do not carry a cheap hose which sells only because of its low price; such hose is worthless for any purpose and it is a waste of your money and our money to buy it.

ASRESTOS WICKING.

Sizes.	Net price eac	
1/4 lb.	Balls\$0.	10
1/2 lb.	Ralls	20

ASBESTOS MILL BOARD.

Sizes. Net price per lb. 16, 16, 16, 16 inch thick...........\$0.08

ASBESTOS ROUND ROPE PACKING.

ASBESTOS BUILDING PAPER.

Net price per 1b......\$0.08

CANDLE WICKING.



.....\$0.75

ROUND SOAPSTONE PACKING.

3/8, 1/2 5/8 inch.....

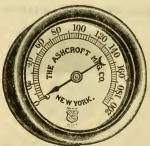
Sizes. Net price per lb. ½, ¾ inch\$0.06

CRANDALL EXPANSION COIL RING PACKING.



Sizes. Net price per lb. 18, 13, 14, 15, 36, 17, 1/2, 58, 34, 78 inch.. \$0.75

STEAM GAUGES.



Sizes. Net price each. 200 lbs. Pressure, 5 inch Case...........\$1.50

GAUGE GLASSES.

		Net price	-		Net price
Sizes.		per doz.	Sizes.		per doz.
1/2×10	inch	\$0.70	5/8 x 12	inch.	\$0.90
½x11	inch	80	5/8×13	inch.	95
1/2×12	inch	90	5/8×14	inch.	1.00
			3/4×10	inch.	1.00
		1.00	3/4×12	inch.	1.05
			3/4×14	inch.	1.20
			34x16	inch.	1,40

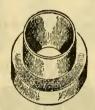
FAVORITE GLASS TUBE CUTTER.



Net price each\$0.25

Note.-This simple little instrument will be found as effective in its results as any one of the Glass Tube Cutters costing five times its price.

BROOK'S MOLDED GASKETS.



For Glass Water Gauges, Indicators and Lubricators.

Sizes	½	5/8	3/4
Net price per	doz\$0.60	\$0.60	\$0.60

RAWHIDE LACE LEATHER.



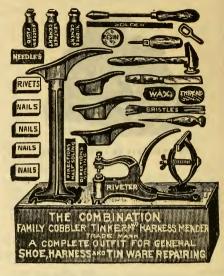
Net price per square foot\$0.30

LACE CUTTERS.

Net price each.

Lace Cutter, cuts 3 to 34 in width\$0.30

COMBINATION SET.



THE COMPLETE "COMBINATION" No. 2.

Family Cobbler, Tinker and Harness Mender. A complete outfit of tools, etc., for general Shoe, Harness and Tinware Repairing. Excels all other sets put up. Net price each\$1.40

CONTENTS.

- 1 Iron Stand for Lasts.
- 1 Iron Last for Men's Work.
- Iron Last for Men's Work, extra large size.
- 1 Iron Last for Boys' Work.
- 1 Iron Last for Children's Work.
- 1 Shoemaker's Hammer.
- 1 Peg Awl.
- 1 Patent Peg Awl Handle.
- 1 Harness Awl.
- 1 Ball Shoe Thread.
- 1 Ball Shoemaker's Wax.
- 3 Shoemaker's Needles.
- 3 Harnessmaker's Needles.
- 1 Package 3/8 inch Half-soling Nails.
- 1 Package 1/2 inch Half-soling Nails.
- 1 Package 5/8 inch Half-soling Nails.
- 1 Bottle Leather Cement.
 - Bottle Rubber Cement.
- Saw and Harness Vise.
- Riveting Machine.
- Box Rivets, assorted sizes.
- Soldering Iron. Soldering Iron Handle.
- Bar Solder.
- 1 Box Resin.
- Copy Directions for Half-soling. 1 Copy Directions for Tin Repairing. 2 Pair Heel Plates.
- 1 Shoemaker's Knife.
 - Securely Packed in Wooden Box.

GENUINE GANDY STITCHED COTTON DUCK BELT. The rapid growth of



this Belting has proven conclusively that our claim for its merits was based on a solid foundation, and all that was needed to prove its real worth was a practical test, under ordinary conditions. This test has been thoroughly

has been thoroughly made in nearly all if not in every State in the Union with the result that the "Original Gandy" has attained the highest pinnacle as a transmitter of power. Its durability and adhesive qualities we be-lieve are unequaled, and it is not affected by atmospheric changes, Heat, Steam, Gas or Acid Fumes, its adaptation is by far greater than any other Belting known to the mechan-

ical world.

It has a honey-comb stitching, all rows being perfectly straight, and sewn under tension from end to end, thus greatly adding to its durability. By an original device all parting or splitting of ends is obviated, hence it gives no trouble from air puffs. It has great strength, traction power and durability, and will outwear either a Leather or Rubber Belt. will outwear either a Leather or Rubber Belt. It is uniform in surface, runs straight and does not slip or harden. It is thoroughly stretched, leaving only the elasticity in the Duck. It is particularly adapted to damp or wet places and to where Belts are subjected to weather elements. It can be made any length without joints, thereby obviating the weakness of mean and the properties of the properties of the properties. weakness of most other makes of Belting. In all we think it is the "King" Belt of the day. We would caution both the dealer and user of Belting alike against buying an imitation Stitched Cotton Duck Belt purporting to equal the "Gandy" and we advise all purchasers when obtaining a Stitched Cotton Duck Belt, to be sure they get the genuine and only "Original Gandy" which bears the stown of the "Original Gandy" which bears the stamp of the "Original Gandy Patented:" none are genuine without it. All Belts bearing this stamp satisfaction or money refunded.

Sizes Larger Than 6 in. 4-ply Shipped Direct from Factory.

		Net	Price	per l	oot.	
		4-Ply.		-	6-Ply.	
2		in	\$0.07	3	in	\$0.14
	,			3 1/2	in	
21/	2	in	4.0	4	in	
3		in	40			
31/	2	in		4 1/2		
4		in	13	5	in	
5		in	16	6	in	
6		in		7	in	
8		in	0.20	8	in	38
9		in	0.4	9	in	44
				10	in	48
10		in		12	in	
11		in			in	ar m.
12		in	40	13		100.63
				14	in	IN P
				15	in	
				16	in	
				18	in	92
		8-Ply.		}	10-Ply.	
		0-1 ly.	¢0 94	12 i	n	.\$0.92
в	11	1	. \$0.04	14 i	n	. 1.02
7		1			n	0
8	iı	1	45			
9	iı	1	52		n	
10	i	n	58		n	
11		n		20 i	11	. 1.45
12		1	.68	22 i	n	. 1.62
12	11	(Continue		of nex	ct column.)	
		(Continue	d cop			

GANDY BELT-Continued.

	8-Ply.											10).	P	1	7.				
7.4	in						\$0.901	24	111									٠		\$1.80
15	111						.95	26	111											2.00
16	in						1.00	28	111							٠			٠	2.20
18	in					ı.	1.10	30	111					٠						2.30
20	in						1.20	36	in					٠	٠	٠		٠	٠	2.84
24	in					٠	1.45	40	111					٠	٠				٠	3,10
30	in		٠.			٠	2.00	44	111	٠	•			•	٠	٠			٠	3.81
36	in		٠.	٠.		٠	2.30	48	111		•			٠	٠	٠	•		٠	4.11
40	in						2.55	04	111		٠			٠	•	•			٠	5.15
								0.0	111											0.1.9

Endless Belts 3 feet extra charged for splice.

And shipped direct from factory.

LEATHER BELTING.



Eally Charanteed

	Tr. 611	ty Comment	in it	44.	
	Barlow	Hardware			
Size					per foot.
1	inch				\$0.10
11/4	inch				
11/2	inch				
2					
2 1/2	inch				
3	inch				
31/2	inch				
4	inch				
5	inch				
6	inch				
8	inch			;	65
10	inch				
P	rices subject	to change	with	iout no	tice.

Note.-We have the best Leather Belt only; no cheap grade.

RUBBER BELTING.

	Barlow	Train	marc	CU.	171	and.		
Width,	in 1	1	1/4	$1\frac{1}{2}$		2	9	1/2
9.Plv	\$0.0	0	0.04	0.0	15	0.00	, ,	
2 Ply						-0.07	- 1	.09
Width	i11	- 3	4	5	6	8	10	10
Q. Dly		.\$0.10	0.13		.20			
4-Ply .		.12	.17	.20	.24	.33	.40	.47

RUBBER BELTING.

В	arlow	Ha	rdw	are	Co.	Ext	ra Br	and.	
3377-Jels						Net	price	per	toot.
	A plan								0.23
5 in. 6 in.	4-pry .					I.			.27
6 111.	4-biy.								34
8 in.	4-ply.								.43
10 in.	4-ply.								
12 in.	4-ply.								.51
Note	A11	of	0111	· Be	ltims	r. ho	th Le	ather	and

Rubber, is guaranteed. We will replace every foot not giving satisfaction.

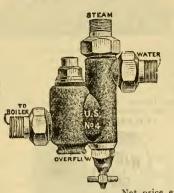
CUT BELT LACING.



Net price per	Broken Bundles
100 ft. Bundles	per foot.

in. wide.....\$1.15 .02 wide..... 1.40 in. .02 1/2 in. wide..... 1.80

U. S. INJECTORS.



Size	S.						price	
No	2.	8	to	15	H.	P	 	\$5.50
No	3	15	to	20	H.	P	 	6.50
No.	1	20	to	30	H	P	 	8.00
NT-	Ξ,	20	+0	40	11	P	 	9.00
INO.	ο,	40	to	20	II.	P	 	12 00
No.	о,	40	to	00	п.	£	 	. 16.00

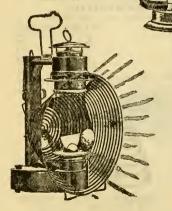
Larger and smaller sizes than above shipped direct from factory. Prices on application.

TUBULAR

LANTERN.

Sizes.	Net price each.
	Tub. Lan-
tern	\$0.50
No. 2,	Tub. Lan-
tern	
	Cold Blast
Tub.	Lantern\$0.90

HAM'S SEARCH LIGHT.





HAM'S DRIVING LAMPS.

Ham's Driving Lamp 4 in. Double Convex Lens...\$2.25

TORCHES.

For Oil or Gasoline Used by Foundries, / Blacksmiths and Large Establishments, Lumber Camps, Mill purposes, etc.

Net	price	each.
		No. 2
For Gasoline.\$	1.25	\$1.00
For Oil	1.40	
Extra burners		
for oil	.95	
Extra burners		
for Gasoline	.85	.75

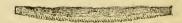


CROSS CUT SAWS.

Disston's Special Deep Gummed Extra High Thin Back Champion or Peg Tooth.



Size.			Net price each.
5	feet	long	\$2.40
5 1/2	feet	long	2.60
3	feet	long	2.75



MOORE BROS.' CONCAVE RAZOR GROUND SAWS.

Size											ľ	V	e ·	t	1	0.1	ri	c	e	ea	acl	1.	
5 1/2	feet	long																		\$:	3.7	5	
6	feet	long																			4.0	0	

DISSTON'S ONE MAN SAWS.

Size.	Net price each.
41/2 feet long	 \$2.00

DRAG SAWS.



Sizes.		Net price each.
No. 11, gauge 65	8 inch, 5	feet long\$3.75
No. 11, gauge 83	10 inch, 41/2	feet long. 3.75
No. 11, gauge 83	(10 inch, 5	feet long. 4.25
	10 inch, 51/2	feet long. 4.50
	x10 inch, 6	feet long. 5.00
	κ 12 inch, $5\frac{1}{2}$	feet long. 5.50
No. 11, gauge 102	x12 inch, 6	feet long. 6.00
No. 11, gauge 12;	$x12$ inch, $5\frac{1}{2}$	feet long. 5.50
No. 11, gauge 123	(12 inch, 6	feet long 6.00

PATENT GROUND AND TEMPERED SOLID TOOTH CIRCULAR SAWS. 26 inches and larger shipped direct from factory.

EXTRA QUALITY, SUPERIOR WORKMANSHIP AND GUARANTEED AS PER WARRANTY.

					Price for Beveling
D:	mi i i .	Size of	Mat. Date.	Extra for Each	New Saws. (Grind-
Diam. Inches.	Thickness Gauge.	Hole, Inches.	Net Price Each.	Additional Gauge Heavier.	ing or beveling old saws extra.)
6	18	3/4	\$.85	dauge Heavier.	Saws Carrary
8	18	7/8	1.20		
10	16	1	1.80	****	
12	15	1	2.25		
14	15	1 1/8	2.75	••••	
16	14	1 1/8	3.30	••••	
18	13	. 11/4	3.75	••••	
20	13	1 5	4.50	••••	
22	12	1 5 1 5	5.50		
24	11	1 %	6.50	****	
26	11	1 3%	7.50	\$.65	\$1.05 per gauge
28	10	1 1/2	8.50	.80	1.20 per gauge
30	10	1 1/2	9.50	.90	1.30 per gauge
32	10	1 5%	11.00	1.00	1.40 per gauge
34	9	1 5%	12.50	1.20	1.55 per gauge
36	9	1 5%	14.00	1.40	1.70 per gauge
38	9	1 5/8	15.50	1.75	1.85 per gauge
40	9	2 '8	18.00	2.00	2.00 per gauge
42	8	2	21.00	2.50	2.20 per gauge
44	8	2	25.00	3.00	2.40 per gauge
46	8	2	30.00	3.50	2.60 per gauge
48	8	2	35.00	4.00	2.80 per gauge
50	7	2	40.00	4.50	3.00 per gauge
52	7	2	45.00	5.00	3.25 per gauge
54	7	2	50.00	6.00	3.50 per gauge
56	7	2	57.50	7.00	3.75 per gauge
58	7	2	65.00	8.00	4.05 per gauge
60	6	2	72.00	9.00	4.35 per gauge
62	6	2	80.00	10.00	4.65 per gauge
64	6	2	90.00	12.00	5.00 per gauge
66	6	2	100.00	15.00	5.75 per gauge
68	5	2	112.50	18.00	6.15 per gauge
70	5	2	127.50	21.00	6.55 per gauge
72	5	2	145.00	24.00	7.00 per gauge
74	5	$\frac{2}{2}$	165.00	27.00	7.50 per gauge
76	5	2	187.50	30.00	
	-		201100	00.00	

No extra charge for Saws one gauge thicker than lists. Circular Saws beveled one gauge without extra charge up to 44 inches. 44 inches and larger beveled two gauges without extra charge. Circular Saws 48 inches and larger. If made thinner than 10 gauge are not warranted, and add 10 per cent, for each gauge thinner than No. 10.

SHINGLE SAWS.

WARRANTED EXTRA CAST STEEL.

(Tapered and Patent Ground.)





LEFT-HAND.

RIGHT-HAND

Dia	meter.	Net pric	e, Each.
30	inches		\$16.00
32	inches		
34	inches		
36	inches		
38	inches		
40	inches		
42	inches		
44	inches		
46	inches		
48	inches		
50	inches		
52	inches		
54	inches		
56	inches		01.00

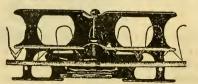
When ordering Shingle Saws, give the following directions plainly: Diameter in inches; thickness or gauge, at center, thickness or gauge, at reiner, thickness or gauge, at rim; diameter of flange, full sketch or pattern of holes, and samples of crew by which to drill and countersink saw. If you have a flange, send it to have holes drilled in saw to fit it. If you wish us to furnish flange, send full and correct sketch of diameter, thickness, holes, etc. State whose make of machine the saw is to run upon, number of teeth, flat or countersunk side, and the direction in which the teeth run. (See cut above.)

CONQUEROR SAW GAUGES.



Sizes.				Net	price	each.
No. 3.	Disston's	for	Small	Circular	Saws	\$1.50
No. 2.	Disston's	for	Small	1 Circula	ar and	

ATKIN'S EXCELSIOR SAW TOOLS.



Net price each75c

SAW SETS.

Extra Quality.



No. 5.

No. 5. Hammer Saw Set......50c

MORRILL'S SAW SETS.



Length 634 inches.



Length 9 inches,

Sizes. Net price each.
No. 1. Morrill 7½ P. for Hand Saws..\$0.40
No. 4. Morrill's, for Cross Cut Saws... 1.20

TAINTOR SAW SET.

One of the best saw sets in the market. Self adjusting except turning the anvil to change the setting.

TAINTOR'S POSITIVE NO. 7.

Net price each70c

WHITING'S SAW SETS.



Net price each.

Whiting's, for Cross Cut Saws......50c

DISSTON'S SIDE FILES.

Net price each.
Side File, complete with Frame.....\$1.25

CROSS CUT SAW HANDLES.



Sizes.	Net	price p	er pair.
No. 3	 		\$0.20
No. 4	 		18

CANT HOOKS.



Net price each. With Iron Wood Handles\$1.25

SOCKET PEAVY.



				Net	price	each.
With	Iron	Wood	Handles.			.\$1.50
	Carried Street	Name .				



MALLEAR		
Sizes Net price each		

HANDLES.

	Net price
	each. per. doz.
Axle handles, Single Bit	\$0.25 \$2.00
Axle Handles, Double Bit	25 2.00
Pick Handles	
Mattock Handles	
Sledge Handles	
Adze Handles	
Muze Handres	

CANT HOOKS AND PEAVY HANDLES.

Net price each. per. doz. Iron Wood, 21/4, 23/8, 21/2 inch. . \$0.35 \$3.75

COMMON WHEELBARROWS.



Cornell steel-tray contractors' barrow; well made, well braced, and of the best material. This barrow is light and strong and

STEEL SHINGLE BANDS.

Net price per lb. Black Shingle Bands, guaranteed..... Prices on application, Galvanized Shingle Bands, guaranteed....
Prices on application.

ENGINE COMPOUND.

Price net per lb. In 25-lb, pails\$0.15

CHARCOAL.

Net price per bag. In 3-bushel bags\$1.00

BLACKSMITHS' COAL.

Net price per 100 lbs. About 250 lbs. in a barrel.....\$0.35

SUPERIOR CHIMNEY BRICK.

Net price per 100\$1.00 FIRE BRICK.

Net price per 100\$2.25

FIRE CLAY.

Net price per sack. Cloth sacks about 100 lbs.....\$0.50

LIME.

Net price per barrel.

CEMENT.

SAYLOR'S & UNIVERSAL.

Net price per barrel. Portland Cement\$1.40 Prices subject to market changes.

HAIR.

Net price per bushel. Plastering Hair



STEP LADDERS.

Sizes. Net price each. 3 foot\$0.48 5 foot84 7 foot 1.05 8 foot 1.15

10 foot 1.40

No. 15

BAG TRUCKS. With Stamped Steel Nose, Turned Bearings. Length Turned Bearings. Length 42 inches. Diameter of Wheels 6 inches. Weight 19 pounds. Net price each. No. 50. Bag Truck...\$2.75 WIRE. Black. Net price per 100 lbs. No. 6 to 9..... Prices on application. No. 10 Prices on application. No. 12 Prices on application No. 13Prices on applicationPrices on application No. 14

Galvanized.

......Prices on application

			Net pr	ice	per 1	00 lbs.
No.	6 to	9	Prices	on	app	lication
No.	10		. Prices	on	app	lication
No.	11		. Prices	on	app	lication
No.	12		. Prices	on	app	lication
No.						
No.						
No.	15		. Prices	on	app	lication

BARBED WIRE.

Galvanized Barbed Wire.Prices on application Galvanized Twisted Wire.Prices on application Galvanized StaplesPrices on application

HEAVY WIRE CLOTH.



Net price per sq. ft. 24 in. wide, 3x3 Mesh Galvanized......5c

24 in. wide, 4x4 Mesh Galvanized.....5½c

90	111.	wide,	oxo	Mesn	Galvar	ized	6c
36	in.	wide.	4×4	Mesh	Galvan	ized	6c
		,		1110011	Guivan	izcu	
	0.4	T T T A 3					
	GA	LVAN	IZE	D PO	JLTRY	NETT	ING.
					No	+	now wo11
10				3.5	116	t price	per roll.
12		wide,	2 11	1. Mes	h		\$0.70
18	in.	wide,	2 it	ı. Mes	h		1.05
24	in.	wide.	2 i1	1. Mes	h ·		1.40
36	in.	wide	9 ;	Moc	h		2.10
		wide,	~ 11	i. Mics	111		2.10
48	in.	wide,	2 11	1. Mes	h		2.80
60	in.	wide,	2 ir	ı. Mes	h		3.50
72	in.	wide.	2 in	1 Mes	h		4.20
24		wide	7 :	Moo	h		3.40
	111.	wide,	1 11	i. Mes	11		3.40
30	ın.	wide,	1 11	ı. Mes	h		4.25
36	in.	wide,	1 it	ı. Mes	h		5.10
7	Vote	Poi	ltrv	Nettin	or contai	ne 150	running
foo	+ in	roll.	3		5 conta	130	rummig
166	C 111	1011.					
			200	TD DT	DE 337T	D.D.	

STOVE PIPE WIRE.

			Net price	per 1b.
No. 17				5c
No. 18				5c
No. 19				5c
Note-	-This wire i	s packed in	n stones w	eighing
12 lbs.	each.			

PITCHER SPOUT PUMPS.



	10		
Sizes Net price each			

DEEP WELL IRON PUMPS.

Sizes 1 2 3 4 Net price each....\$4.50 \$4.75 \$5.00 \$5.25

WOOD PUMPS.

		Net price each.
Common	Wood Pump	\$3.25
	ined Wood Pumps	
	og	
Pump Co	ouplings	et price each, 40c

THE AMERICAN GROCER SCALES.

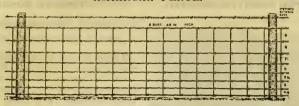


CARPET SWEEPERS.



Kinds.	Net price	each.
Bissell's	Grand Rapids	\$2.50
	Ideal	
	American Queen	
Dissell's		2.75

AMERICAN FENCE.

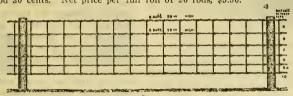


SPECIAL FARM FENCE, WITH BARBED WIRE.

Good and inexpensive design for cattle, horses and sheep. By using one or more lines of barbed or plain wire will make a fence that will be high enough to turn all animals.

SPECIFICATIONS—Design No. 845, Bars 8. Height in inches, 45. Stays, 12 inches apart.

Net price per rod 30 cents. Net price per full roll of 20 rods, \$5.50.



SPECIAL SHEEP AND HORSE FENCE.

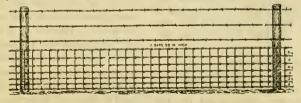
The height of the fence is subject to variation by distance placed from ground. It is constructed for the purpose of providing an efficient fence at lowest cost, where no necessity exists for a pig-tight fence. We show the fence placed 10 inches above the ground surface at the owest extremity, bringing top bar 45 inches above ground surface.

SPECIFICATIONS—Design No. 635, Bars 12. Height in inches 35. Stays 12 inches apart. Net Price per rod, 25 cents; Net Price per full roll of 20 rods, \$4.50.



No. 1452. POULTRY AND RABBIT FENCE.

LIGHT SPECIFICATIONS—Top and Bottom Bars, No. 10 Wire. Intermediate Bars, No. 12 Wire. Stays, No. 13 Wire. Stays 6 inches apart. 14 Bars high. 52 inches high. Net Price 50 cents per rod; Net Price per full roll of 20 rods, \$9.00.



26-in. HOG FENCE.

Net Price per rod 25 cents. Net Price per full roll of 20 rods \$4.50 Design No. 726. Bars 7. Height in inches 26. Stays 12 inches apart.

More miles of this fence are used on American farms than of all other styles of wire fence combined. With the barbed wire above, it makes a fine stock fence. The illustration shows stays six inches apart, and with this close mesh is the most efficient hog fence. QUALITY-From the beginning we have aimed to furnish a quality of steel in manufacturing American fence, the best that could be produced for the purpose and services indicated. We have from time to time made improvements in the quality, temper and composition of our steel fence wire, and have recently made a further stride in this direction which we are satisfied, will prove by far, the most important and satisfactory advancement ever made in the manufacture of wire fencing.

PERFECTED GRANITE ROOFING.



Is Easy to Lay.

Perfected Granite Roofing is shipped to the consumer ready for immediate use, requiring neither repainting, coating, or any other treatment before laving.

Anyone who can handle a hammer and drive a nail properly can lay Perfected Granite Roofing as it should be laid by following the plainly given, simple directions which accompany each roll.

Is made of a fibrous composition that is practically fire proof, which is evenly covered with white pebbles of uniform size by especially designed machines.

The material used being incombustible, the finish product will not burn, it will only char after being subjected to long continued intense heat, or contact with vigorous flames.

It is Durable.

Perfected Granite Roofing outlasts all other composition and metal roofings. It does not rust like tin, rot like shingles, nor crack like slate. Under all the varying conditions of the four seasons, it stands impervious. You run no risk in covering your buildings with this roofing. It has stood the test of time and is holding its old friends while making new ones rapidly. Have you tried it? Send for samples.

It is Waterproof.

Against the heaviest rain or penetrating, melting snows of winter, Perfected Granite is an absolute protection. Properly laid, it is like one unbroken covering over the roof, shedding water rapidly and drying quickly. It wears longer than other composition roofings because it is chemically prepared to resist the effect of the weather, and heat, gases and fumes. These qualities have made Perfected Granite Roofing the standard roofing of America.

Net price per square.....\$2.75

TISBEST ROOFING.

An improved high-grade prepared Roofing of superior tensile strength and durability.

Tisbest Roofing is constructed of high grade wool-felt, very strong and long fibred, saturated thoroughly with a waterproofing compound which will not evaporate. The finished fabric is pliable, very tough and strong and absolutely waterproof.

At the time of manufacture Tisbest is thoroughly coated with a protective composition or both sides. On the upper side the coating is used of course to add to the weatherproof qualities to enable the roofing to resist the ac tual wear and tear of the weather. On the under side the coating protects the roofing against the attack of steam or other fume: from inside the building. The protective quali ties of this coating exceed those of sand dressing, and the coating will be found mucl longer lived than the ordinary paint used or other roofings.

Tisbest Roofing is adapted to any style o architecture, being suitable either to steep o flat roofs. It can be laid over shingle roof without stripping of the shingles, as its tensil strength is sufficient to enable it to resis puncture by the roughness of the foundation Likewise it is applicable over tin roofs of other roofings where it is desirable to avoithe expense of removing the old covering.

ADVANTAGES OF TISBEST.

First.—Tisbest is absolutely weatherproo By this we mean that winter snows piled thicl ly and heavily upon it will find no weak spoin it and will not cause decay or wet-rot. He weather will not soften it, as it contains n gummy materials to ooze out and flow toward the gutters. Likewise it is not affected t cold temperatures and will not crack or stiffe in the severest cold snap. Zero weather wi not shrink it or cause it to lose in the slighte: its flexibility. On the other hand, when e: posed to continuous heat of 120 degrees for te months, the fabric did not lose in weight an remained flexible and pliable. In other word there is no heat, even in the tropics (when it has considerable sale), which is too seven for Tisbest.

See next page.

BARLOW RUBBER ROOFING. PRESSED STEEL BRICK SIDING.

One ply weighing complete about 35 pounds per 108 foot roll.

Two ply weighing complete about 42 pounds per 108 foot roll.

Put up in rolls containing one square (108 square feet) including caps, nails and cement in sufficient quantities.

One plyNet price per square \$1.50 Two plyNet price per square 2.25

BLACK DIAMOND TARRED FELT ROOFING.





Two Plyper square	\$.75
Three Plyper square,	.95
Coating for Roofingper gallon,	.20
Coating in half bblsper gallon,	.17
Coating in bblsper gallon,	.15
Tin Caps for Roofingper pound,	.06
Nails for Roofingper pound,	.05
5 cents less per roll in 25 roll lots.	

A READY ROOFING WITH A REAL RECORD.

Black Diamond has satisfactorily served in all climates and weather for 30 years. It was the first ready roofing made, it is still the best, carefully put together in convenient form to handle, making a strong, durable weather-proof covering.

BUILDING PAPERS.

Stringed Felt, (500 sq. ft. in a roll)	\$1.40
	42,120
Red Rosin, Sized, (500 sq. ft. in a	
roll), No. Cper roll,	50
1011), 140. Cper 1011,	.00
Heavy Rosin, Sized, (500 sq. ft. in a	
roll), No. 8per roll,	1.00
Buckskin, (500 sq. ft. in a roll)	.90
	.03
Carpet Feltper yard,	.00

SEWER PIPE AND FITTINGS.

Sizes 3 to 24 inches. Prices on application.

GALVANIZED BARBED WIRE.

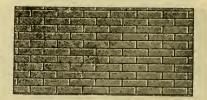
You Can Always Buy Barbed V Cheaper from Us Than Any Other Place. Barbed Wire

GET OUR PRICES.

SCREEN DOORS-WINDOW SCREENS-BLACK SCREEN WIRE CLOTH.

Width-24, 26, 28, 30, 32, 34 and 36 inches.

Shipped from Factory.

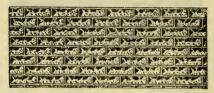


PAINTED OR GALVANIZED.

PaintedNet price per square, \$2.13 GalvanizedNet price per square, 3.60

Sheet Metal Siding lately placed on the market, is an excellent imitation of brick. On a building it is the counterpart of finely finished brick, making the most attractive and handsome sheet metal covering yet produced or offered the building trade. It makes an elegant facing for stone fronts and certainly takes the place of the old galvanized iron fronts, because it is cheaper, makes a handsomer front and is more easily applied.

ROCK FACE BRICK SIDING. Shipped from Factory.



PAINTED OR GALVANIZED.

PaintedNet price per square, \$2.25 GalvanizedNet price per square, 3.70

Size of single brick, 2 4-5x81/4 inches. Sheets 60x28 inches. Its low price commends it to all. Architects, Builders and Contractors will readily see the advantages of using these patterns for side coverings on all buildings, in preference to the old style corrugated, beaded and other metal sidings. Used extensively for side covering on business blocks, dwellings, school houses, factories, etc.

ROCK FACE STONE SIDING.

No. 1.

Painted Net price per square, \$2.25 Galvanized Net price per square, 3.70 Size of single stone, 7x12 inches. Sheets, 60x28 inches.

ROCK FACE STONE SIDING.

No. 2.

PaintedNet price per square, \$2.25 Galvanized Net price per square, 3.70

Size of single stone, 9½x20 inches. Sheets, 60x28 inches. A square of Rock Face Brick or Stone consists of eight and four-sevenths sheets 60 inches long by 28 inches wide. In ordering Plain or Rock Face Siding, allow four to six square feet to the hundred for laps.

Shipped from factory.

BEADED SIDING AND CEILING.

PRESSED STANDING SEAM ROOFING.

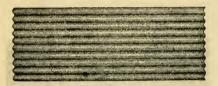


PAINTED OR GALVANIZED.

Net price per square.

length of sheets wanted.

CORRUGATED SHEETS.



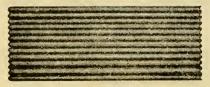
21/2 inch Corrugation.

PAINTED OR GALVANIZED. Net price per square.

Painted, 28 gauge\$2.00 Galvanized, 28 gauge 3.50

Corrugations measuring two and one-half inches from center to center and five-eighths inch deep. Regular lengths 6, 7, 8, 9 and 10 feet by 26 inches wide and made from No. 14 gauge material and lighter. This style and size of corrugation is more largely used than any other kind for roofing purposes. Covering width about 24 inches.

CORRUGATED SHEETS.



5% and 11/4 inch Corrugated.

PAINTED OR GALVANIZED.

Net price per square.

Painted, 28 gauge\$2.10
Galvanized, 28 gauge3.65
Regular lengths 6, 7, 8, 9 and 10 feet by 26 inches wide, and is made from 20 gauge and lighter. This style is used for roofing, siding, ceiling and partitions. Covering width about 24 inches.

28 Gauge.

Net price per square.

Pressed Standing Seam Painted......\$2.10 Pressed Standing Seam Galvanized..... 3.75

With cleats, add 10c per square.
Is furnished in sheets with plain ends in lengths of 6, 7, 8, 9 and 10 feet. Made in all gauges. No. 24 and lighter. This has a cap on one side and a one inch flange on the other. It is a good style for steep roofs, as there are no edges to be turned up by workmen.

V CRIMPED STEEL ROOFING.

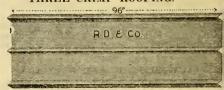


PAINTED OR GALVANIZED.

Net price per square. Painted, no sticks, 28 gauge\$2.00 Galvanized, no sticks, 28 gauge 3.55 With sticks, add 10c per square.

This will lay 24 inches wide, as they are 24 inches from center to center of crimp. Lengths 6, 7, 8, 9 and 10 feet. It is made from 28 to 18 gauge. This makes a cheap, durable free proof roofing and siding, used largely for covering rolling mills, saw mills, cotton sheds, barns, etc. It can be laid upon sheeting boards, puntins, or direct to rafters.

THREE CRIMP ROOFING.



PAINTED OR GALVANIZED.

Net price per square Painted, no sticks, 28 gauge....\$2.10.
Galvanized, no sticks, 28 gauge.....3.65
With side sticks add 10c per square.
With side and center sticks add 20c per

square.

Lengths 6, 7, 8, 9 and 10 feet. The crimps are one foot apart and represent barn board siding. The sheets lay two feet wide by full length of the sheet less one inch lap on end of sheet.

Notice-All Prices on this Page are Subject to Market Changes.

VALLEYS AND ROOF GUTTERS.

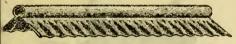


This Valley and Gutter is made from Terne 25 pound coated plate in any desired length; locked and soldered on one side and painted red on both sides with pure linseed oil and metallic ore.

Wid	th			.10	14	20	28 in.
Net	price	per	foot	6	8	12	17c

CORRUGATED ROLL RIDGING.

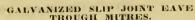
Shipped from Factory.



Net price per foot.

Is the most perfect article on the market, and an absolute protection against storms blowing under. It is made with 2½ and 1¼ inch corrugations. In ordering state the kind wanted.

ROUND RIDGE CAP.





SINGLE BEAD.

 Sixes
 3½
 4
 4½
 5
 6 in

 Net price each
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 5 6 in.

6 in. Net price each27 GALVANIZED END PIECES AND

OUTLET. Single or Double Bead.



4 41/2 5 Net price each S. B. 20 22 25 25 Net price each D. B. 23 25 27 27 30c 32c GALVANIZED SLIP JOINT END CAP.



 Sizes
 ...
 ...
 3½
 4
 4½
 5
 6 ir

 Net price each S. B. 8
 9
 10
 11
 12c

 Net price each D. B. 8
 9
 10
 11
 12c

 6 in.

CORRUGATED ROUND GALVANIZED ELBOWS AND SHOES.



Diameter.	Girt.	Net price	per foot.
of roll.		Painted. Ga	lvanized.
1½ in.	7 in.	3 'c	3½c
1½ in.	8 in.	3½c	4 c
2 in.	10 in.	4½c	5 c
2½ in.	12 in.	5½c	6 c
3 in.	14 in.	6½c	7 c







6 in. 15 Price Elbows 10 12 20c 20c 10 Price Shoes8

GALVANIZED SLIP JOINT EAVE TROUGH.

Best Quality-No Culls.



SLIP JOINT SINGLE BEAD.

4 4 1/2 5 6 in. 6 7c 5 51/2

SLIP JOINT DOUBLE BEAD.

6 in.

No soldering required. Half the labor saved. Not affected by contraction or expansion. Much stronger than soldered trough. Does not get out of order. Right hand and left hand in Single Bead.

BOUND GALVANIZED CORRUGATED CONDUCTOR PIPE.



CONDUCTOR PIPE.

Made in 10 foot lengths only. Much stronger and more durable than pieced conductor. Is not affected by expansion or contraction.

RAIN WATER CUT OFF.



The cheapest and best Cut-off ever introduced. Automatic, durable and simple. The only absolute self-locking automatic cut-off in the market.



GALVANIZED WIRE CONDUCTOR STRAINERS.

Sizes. STRAINER

....2 3 4 5 6 in.

Net price each.

....6 8 11 14 18c
Invaluable for keeping leaves and similar obstructions out of conductor pipe.

RED IRON ORE ROOF PAINT.





Sizes			Net	price	per	gallon.
One	Gallon (Cans	 			80c
Five	Gallon (Cans	 			70c
Half	Barrels		 			70c
Full	barrels		 			60c
_	. 11					

One gallon will cover from 400 to 600 square feet one coat. Owing to its heavy body, adhesiveness and elasticity, it is far the best paint in the market for iron, tin and wood painting.

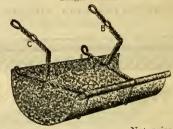
TINNED CONDUCTOR HOOKS.

For Wood.

Sizes2 3 4 5 6 in. Net price ea.2 3 4 5½ 6½c Heavily tinned.

EAVE TROUGH HANGERS.

Single Bead.



Sizes									price	
31/2	inch									.20c
4	inch									.20c
6	inch									.35c
Th	is h	ano	er :	ie r	nade	of	the	best	galvan	ized

This hanger is made of the best galvanized steel wire. Easily applied—cannot get out of place.

SHEET IRON.



BLACK.

		DLA	C12.			
		Length.	Net	price	per	100 lbs.
No.	14x24x9					
No.	16x24x9					
No.	18x24x9					3.10
No.	20x24x9					
No.	22x24x9					
No.	24x24x9					
No.	26x24x9					
No.	28x24x9	3 in				3.25

GALVANIZED.

Ga.	Width. Length.	Net price per 100 lbs.
No.	16x30x96 in	\$4.00
No.	18x30x96 in	4.00
No.	20x30x96 in	4.00
No.	22x30x96 in	4.25
No.	24x30x96 in	4.25
No.	26x30x96 in	4.50
	28x30x96 in	5.00

Notice—All Prices on this Page are Subject to Market Changes.

PONY FEED CUTTER.



Well Made, Light Running, Nicely Balanced.

A hand cutter with one knife, of simple design, for cutting hay, straw and corn stalks, and is adapted to the requirements of parties feeding one to five or six animals. It is strong, light running and nicely balanced, which makes it run steady when turning fast. Lengths of cut, ½, 1, 1½, and 2 inches. Weight knocked down and packed for shipment, 165 pounds.

Net price each. No. 111/4. One Knife 111/4 in. long.....\$9.00

OHIO HAND FEED CUTTER.

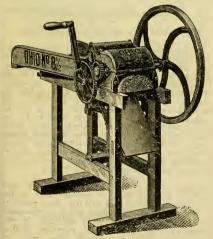


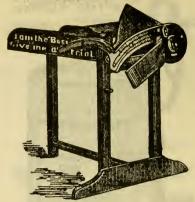
Fig. 779-No. 81/2.

Solidly Constructed, Nicely Finished, Light Running.

Two-knife machines are sent when not otherwise specified,

Weight, 165 lbs.
Two Knives. Length of knives 8½ in. No. 8½, each.....\$12.50

FEED CUTTER.



Net price each\$2.50

CLEARCUT FOOD CHOPPER.



Net price each. Sizes. No. 200 No. 300

Nicely tinned-will not rust. It chops-does not tear, smash, squeeze, grind.

It chops meat, both raw and cooked.

It chops fruits, vegetables and all other food.

It is easy to operate. It is easy to adjust.

It is easy to clean.

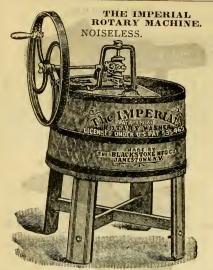
It is easy to take apart and put together.

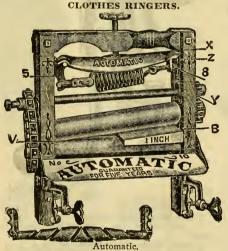
There are few parts. Nothing to get out of order.

It has cutters for cutting in pieces of various sizes. The cutters are made of steel; they cannot

break.

The cutters are self-sharpening. Four sizes of choppers are made.





THE AUTOMATIC WRINGER IS THE BEST WRINGER MADE.

Grand					each.
Bicycles Wringer Easy Wringers .	 	 	 	 	3.50

UP-TO-DATE WASHING MACHINE.



Net price each.....\$9.5

The Up-to-date Washer will wash quickly, thoroughly and without tiring the operator or injury to the clothes.

It has a rotary motion without the turning of a crank.

A continuous motion without constant exertion.

High speed with the least possible effort.

It combines a flywheel with the lever motion. The lever being operated in the most natural way (a downward thrust) does not tire the operator, but gives great momentum to the flywheel, which then does the work. A downward thrust of the lever puts the machine in motion; it is not necessary to follow the lever down to its lowest point, but it can be released and no further effort need to be exerted until it starts downward again. With every motion of the lever the flywheel makes seven revolutions and the Dasher turns almost completely around. The Dasher starts slowly, gradually increases in speed and then comes to an easy stop before beginning again.

There is no jerking in its movements right and left and therefore no unusual wear on the machine and the clothes will not wear and tear in the washing. This right and left movement of the Dasher causes great agitation in the water and the dirtiest and greasiest clothes are cleaned in a surprisingly short space of time.

The Up-to-date Washer is built to wear and is solid and substantial. The few metal parts are simple, strong and not liable to get out of order. All parts are, however, interchangeable and should they be broken by accident or misuse can be replaced at slight expense.

MALLEABLE IRON RAKES.



Sizes	10	12	14 teeth
Net price each\$0	0.15	.20	.25

STEEL RAKES.

Full Polished. Straight Pattern. 16 teeth 12 14 0.40 .45 Net price each\$0.40 .50

SOLID BOW RAKES.



16 teeth

WIRE LAWN RAKES.



All Steel, Tinned, with Handles.
Teeth, net price each......50c

WOOD RAKES.



Common. \$0.15

Premium. \$0.25

Eagle.

BROOKS' CORN KNIVES.

ROGERS SILVER SPOONS.



Rogers Triple Plated Tipped Pattern. Tea Tipped Pattern, Nct price per set of Table Tipped Pattern, Net price per set of Six 2.25

ROGERS SILVER KNIVES AND FORKS.

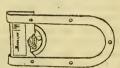


No. 12 Rogers Triple Plated Square
Handle. Net price per set of 12 pieces

—6 knives and 6 forks.......\$3.25

LANE'S STEEL BARN DOOR HANGERS.





Nos. 1 and 1½. No. 30. Anti-Friction Rollers. Covered Roller

Bearings. Net price per pair

O. N. T. TRACK.



With Brackets, Suitable for any Hanger. In lengths of 4, 5, 6, 8, 10 feet.

With screws4c

BARN DOOR STAY.



No. 7. To Screw.

R. F. D. MAIL BOX.

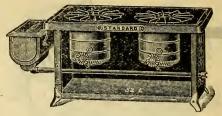


The kind the Postoffice Department especially recommends. See order of Postmaster General, No. 739.

Approved by Postmaster General, February 9, 1904, Re-approved by Special Examiners, March 9, 1907.

The Ohio is made of honest material throughout; lid is made of 20 gauge Galvanized steel (very heavy) and body of 22 gauge Galvanized steel, thoroughly reinforced by a 5% bead in front and back of opening, keeping the box in shape and making it storm proof as the cover fits snugly against the bead. No other box has this feature. Has automatic signal painted red and poised above the box, making it easily seen by the carrier; lid cannot blow open or freeze shut, nor can it be left open by mistake, as it is self-closing. The body of the box being round, pennies or mail can be removed with gloves or mittens on, and there are no cracks in it around the edges, as in the square boxes, for postal cards or change to lodge in, but both mail and change are always in plain sight of the carrier. The box can be fastened to a post, tree or any convenient object.

WICKLESS BLUE FLAME OIL STOVES.



No. 52R.

Net price each. Top 23x14 inches. Height 12½ inches...\$4.00



No. 53R.

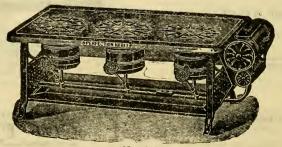
Net price each. Top 33x14 inches. Height, 12½ inches...\$5.00 These stoves have powerful 3½ inch burnes and are easy to operate and understand. They

produce an intensely hot smokeless blue flame.



No. 812.

Top 14x32 inches. Height, 121/2 inches...\$5.00

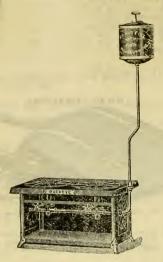


No. 813.

Net price each.

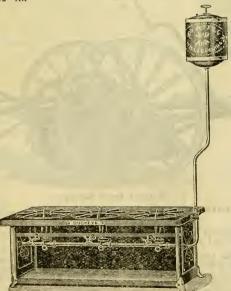
No. 813. Size Top 14x32 inches. Height 121/2 inches

GASOLINE STOVES.
Shipped from factory.



No. 2-H BUCKEYE JUNIOR. TWO BURNER. WEIGHT, 281/2 LBS.

Top. 14 x 22 in. Height. 12 in. Net price \$3.50



No. 3-H BUCKEYE JUNIOR. THREE BURNER. WEIGHT, 311/2 LBS.

Top. 14 x 32 in. Height. 12 in. Net price \$5.00

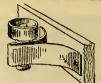


ALASKA FREEZERS.

A simple, perfect working freezer. The dasher is made on scientific principles. Mixes the cream thoroughly. Easily cleaned and does not get out of order.

Sizes 2 3 4 6 8 10 12 qt. Net price ea. 1.85 2.25 2.75 3.25 4.00 5.00 6.00

LANE'S STAY ROLLERS.



DRAG SCRAPERS.



The gauge of steel used in this Scraper is as heavy as that used by any of our competitors, and of a better quality.

You will notice from the above cut the flange projecting around the top edge of the Scraper, which makes it 25 per cent, stiffer than a Scraper of the same gauge without the flange. The Haslup is the only Scraper made with this flange.

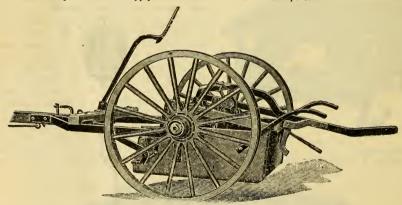
Sizes.

No. 1. Capacity 7 cubic feet, weight about 100 pounds. \$4.19

No. 2. Capacity 5 cubic feet, weight about 90 pounds. 3.84

No. 3. Capacity 3½ cubic feet, weight about 80 pounds. 3.70

Note—Dozen price does not apply to less than a half dozen Scrapers,



Shipped from factory.

THE LATEST IMPROVED HASLUP PATENT WHEEL SCRAPER LEADS THEM ALL.

Cupped hubs and closely fitted sand bands, make the best protection on Spindles against sand. Our wheels are strong, and our Spindles wear the longest.

Description.of Sizes.

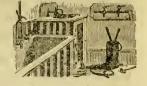
Net price cach.**

Nos. 2½ and 3 wheelers are furnished regularly with snatch rod, and No. 2 when specially ordered.

PLUMBING AND TINSMITHS' WORK.

Edited by John Black. 92 pages. Illustrated by 80 engravings.

This little book deals with roof-covering, roof work, gutters, covering flats, platforms, dormers, ridges, etc., finials, pipes, the storage and supply of water, delivery and control of water, elementary sanitation, soil pipes, closets, baths, traps, lead lining for sinks, development of surfaces so as to get the cuts for elbows, angles, etc., how flashings should be put down, snow boards, principles of water supply, drinking water supply, float tanks, hydraulics, etc.



Net price each

WHAT TO DO IN CASE OF ACCIDENT.



A book for everybody. 96 pages. This is one of the most useful books ever published. It tells exactly what to do in case of accidents, such as severe cuts, sprains, dislocations, broken bones, burns with fire, scalds, burns with corrosive chemicals, sunstroke, suffocation, with foul air, hanging, drowning; frost-bite, fainting, stings, bites, starvation, lightning, poisons, accidents from machinery, gunshot wounds, etc., etc. It ought to be in every house and workshop, for young and old are liable to accident, and the directions given in this book might be the means of saving many a valuable life,

Net price each

PAINTING AND VARNISHING.

Edited by John Black. 94 pages. Illustrated by 20 engravings.

A practical manual treating on materials, principles of color, mixing paints, preparation of surfaces, distemper, decoration, hints on dealing with customers, hints on the use of ration, nints on deating with customers, hints on the use of brushes, what colors to use in different rooms, etc.; varnishes and varnishing, recipes for making various kinds of varnish, graining to imitate oak, mahogany, satin wood, walnut and rosewood; marbling white veined, dove colored, red, green, jasper, black and gold, Florentine, Sienna, etc.; inside painting and decoration gilding, sign writing, lettering, alphabets, stencils, monograms, etc.; outside painting, brickworks, metal work, etc.



Net price each\$0.25

HOW TO MEASURE UP WOODWORK THE STEEL SQUARE POCKET FOR BUILDINGS.

By Owen B. Maginnis,

Author of "Roof Framing," "Bricklaying,"

Net price each.....\$0.50



79 Pages.

161 Illustrations.

Useful Tables.

Well Printed.

Neatly Bound.

Price, 50 cents. Copies sent postpaid on receipt of price.

SQUARE POCKET



BOOK.

A practical and handy Treatise, Giving the Best Methods of Using the Carpenter's Steel Square.

Bv

D. L. Stoddard

109 Pages. 112 Illustrations.

This is a boiled-down compendium of information about the square which can be referred to quickly, having a thorough index. Cloth bound. Price, 50 cts. Postpaid. Money back if not satisfactory.

Net price each.....\$0.50

The books described in the list below are practical and reliable. They are 12 mo, in size—except where otherwise stated—printed on good paper and well illustrated wherever the subject needs it and artistically bound in cloth. Any book sent postpaid on receipt of 50 cents.

THE ELEMENTARY PRINCIPLES OF MACHINE DESIGN. By J. G. A. Meyer. Handsomely illustrated.

A simple and accurate introduction to the designing of machinery, showing and explaining step by step how to get the Proportions of Connecting Rods, Pistons, Cylinders, Slide Valves, Eccentric Rods for Steam Engines, Cotter Joints, Screw Wrenches, etc., etc. With full instructions for Setting a Plain Slide Valve and Eccentric. Also practical and explanatory hints for making all the necessary calculations and working drawings.

ELECTRICAL RULES, TABLES, TESTS AND FORMULAE. By Andrew Jamieson, C. E. Illustrated.

This is the most compact and thorough work in the market for the practical electrician. It contains minute directions for all calculations, tests, etc., with clear engravings of the apparatus employed. The following list of contents will give an idea of its scope: Formulae of the Absolute Units, Practical, Electrical, Mechanical Heat and Light Units,—Electro-chemical Equivalents, Electrolysis, Heat and Light Energy of Combustion—Practical Methods of Electrical Measurements—Electrical Conductors, Copper, etc.—Insulators, Gutta Percha, etc.—Submarine Cables—Aerial Land Lines—Electric Lighting and Transmission of Power.

THE PRACTICAL UPHOLSTERER. This work contains a number of original designs in drapery and upholstery, with full explanatory text and an immense number of working illustrations.

It gives a description of tools, appliances and materials. It tells how to upholster chairs, parlor furniture, bedroom furniture, etc. It contains rules for cutting bed-hangings, window curtains, door hangings, blinds and for measuring and cutting carpets. Gives arithmetical calculations for cutting carpets, curtains, etc., mantel-board drapery, festoons, and, in short, everything pertaining to upholstery.

There is nothing published in this country that is so thorough and complete in the instructions given for upholstering as this book. COMMON SENSE IN THE POULTRY YARD. A story of Failures and Successes, including a full account of 1,000 Hens and What They Did. With a complete description of the houses, coops, fences, runs, methods of feeding, breeding, marketing, etc., and many new wrinkles and economical dodges. By J. P. Haig. 192 pages, illustrated.

This is a lively and entertaining work which embodies the actual experience of many years in the keeping of poultry in large and small numbers. It is the most thorough and practical work on poultry in the market, and contains an amount of solid information which to even the keeper of a dozen fowls will make it worth many times its cost.

A DICTIONARY OF PRACTICAL BEE KEEPING. Discusses thoroughly nearly Five Hundred Subjects. Numerous illustrations, Notes and Practical Hints. By John Phin.

Gives in condensed form an immense amount of valuable information under the different headings. Under the heads, Bees, Comb, Glucose, Honey, Race, Species, Sugar, Wax, and others, it brings together a large number of important facts and figures which are now scattered through our bee literature and through costly scientific works and are not easily found when wanted.

HINTS FOR BEGINNERS WITH THE MICROSCOPE. By John Phin. Second Edition illustrated.

This book was prepared for the use of those who, having no knowledge of the use of the microscope—or, indeed, of any scientific apparatus—desire simple and practical instruction in the best methods of managing the instrument and preparing objects. It forms an indispensable companion to every cheap microscope.

MARVELS OF POND LIFE. A Year's Recreations among the Polyps, Infusoria, Rotifers, Water Bears and Polyzoa. By Henry J. Slack. Second Edition, illustrated.

The object of this book is to tell the young microscopist where to look for the finest objects, how to find them and to give the names, the nature and the habits of the principal objects which he is liable to meet. The numerous cuts render it easy to identify them, and the descriptions are clear, simple and intensely interesting.

The books in the list below are all practical and reliable, being specially prepared for self-instruction. The books are 12 mo. in size and contain from 24 to 96 pages, well printed, on good paper, and illustrated wherever the subject needs it. Bound in neat paper covers. Any book sent postpaid on receipt of 25 cents. The cheapest series of really good technical books now in print.

HOW TO BECOME A GOOD MECHANIC. By John Phin. Intended as a practical guide to self-taught men, telling what books to use; how to begin; what difficulties will be met; how to overcome them; in a word, how to carry on such a course of self-instruction as will enable the young mechanic to rise from the bench to something higher.

DRAUGHTMANSHIP. By John Black. This little manual is intended for those who desire some little knowledge of architectural drawings and to whom the study of the larger treatises would not be suitable.

DRAWING INSTRUMENTS. By an Old Draughtsman, A treatise on the use and care of drawing instruments.

THE SLIDE RULE AND HOW TO USE IT. By Fred T. Hodgson. This is a compilation of explanations, rules and instructions suitable for mechanics and others interested who wish to master the use of this time-saving calculating instrument.

THE ENGINEER'S SLIDE RULE AND ITS APPLICATIONS. By William Tonkes. A complete investigation of the principles and uses of the Engineer's Slide Rule.

HOME HANDICRAFTS. Edited by John Black. This book will be appreciated by every one who take's advantage of their spare moments to construct or decorate some detail of their homes. A valuable book for the handy man.

SUCCESS WITH RECIPES. By John Phin. A practical guide to success in the use of recipes, formulae, etc., with hints on chemical and mechanical manipulation. Intended as a supplement to all books of recipes.

HINTS FOR PAINTERS, DECORATORS AND PAPER HANGERS. By An Old Hand. A most useful book treating on the preparation of surfaces, materials used, mixed paints, operations, tastes in color, graining, paper hanging, estimating cost of work, useful recipes, etc. A valuable book for the amateur.

DECORATING. Edited by John Black. The hints and suggestions contained in this book will be appreciated by the practical painter as well as by every householder who desires to have his home neatly and tastefully ornamented.

CONCRETE. By Frank Jay. Written by an expert of many years' exeprience in concrete, and fully describes up-to-date methods of building walls, piers, columns, floors and chimeys; also armored concrete construction, dams, etc.

ARTIFICIAL STONE, TERRA COTTA, ETC. Edited by John Black. Concisely describes the manufacture and uses of various kinds of artificial stone, terra cotta, hollow blocks, scagliolia, etc.

MASONRY. Edited by John Black. This little book deals with the operation of the stone mason in a thoroughly practical manner, describing stone cutting as well as building walls, etc.

BRICKLAYING. Edited by John Black. Describes how to build walls; bonding, piers, window openings, chimneys, cornices, etc.

CEMENTS AND GLUE. By John Phin. A practical treatise giving nearly 200 recipes on the preparation and use of all kinds of cements, glues and paste.

PLASTERING. Edited by John Black. This book contains quite a fund of information useful to the apprentice as well as the old hand at the plasterer's trade.

SCAFFOLDING. Edited by John Black. The subject of the erection of proper scaffolding for various purposes is practically treated in this book. Useful for everyone called upon to erect scaffolding that will be safe at the least cost in time and money.

HINTS AND AIDS IN BUILDING AND ESTIMATING. A useful handbook for every one engaged in building, as it contains hints and prices, tells how to measure, explains building terms, etc.

SLATING AND TILING. Edited by John Black. Many buildings now have slate or tile roofs, and this book gives concise information about the various points.

RAFTER AND BRACE TABLES. By H. J. Aurlie. This time-saving reference book was prepared for the convenience of carpenters and builders, as it shows at sight the length of rafters and braces.

WOOD TURNING. Edited by John Black. The art of wood turning is simply and clearly described in this book and will prove useful for the amateur and young wood worker.

GLAZING. Edited by John Black. The information in this manual will save much time and trouble to the practical glazier, while the apprentice will find it a trustworthy guide.

THE PISTOL AS A WEAPON OF DEFENSE, IN THE HOUSE OR ON THE ROAD. By John Phin. This book aims to instruct peaceable and law-abiding citizens in the best means of protecting themselves from the attacks of the brutal and the lawless.

SHOOTING ON THE WING. By An Old Gamekeeper. Plain directions for acquiring the art of shooting on the wing. With useful hints concerning all that relates to guns and shooting, particularly in regard to the art of loading so as to kill. To which has been added several valuable and hitherto secret recipes of very great importance to the sportsman.

THE SUN. A familiar description of its phenomena. By Rev. Thomas William Webb, Author of "Celestial Objects for Common Telescopes." 80 pages; illustrated by 17 engravings. A book for everyone interested in Nature, as it simply and fully describes the sun, tells about spots, eclipses, etc.

The books described in the lists below are practical and reliable. They are 12 mo. in size—except where otherwise stated—printed on good paper and well illustrated wherever the subject needs it and artistically bound in cloth. Any book sent post paid on receipt of 50 cents.

WATER CLOSETS. A Historical, Mechanical and Sanitary Treatise. By Glenn Brown.

This book contains over 250 engravings drawn expressly for the work by the author. The drawings are so clear that the distinctive features of every device are easily seen at a glance, and the descriptions are particularly full and thorough. The paramount importance of this department of the construction of our house renders all comment upon the value of such a work unnecessary.

EASY LESSONS IN ARCHITECTURE. Consisting of a series of questions and answers explaining in simple language the principles and progress of architecture from the earliest times. By Thos. Mitchell. Illustrated by nearly one hundred and fifty engravings. New Edition,

The present work is probably the best architectural text-book for beginners ever published. The numerous illustrative engravings make the subject very simple, and prevent all misunderstanding. It tells about the different styles, their peculiar features, their origin, and the principles that underlie their construction.

CARPENTER'S AND JOINER'S POCKET COMPANION. Containing rules, data and directions for laying out work, and for calculating and estimating. Compiled by Thos. Moloney. Illustrated, pocket size.

This is a compact and handy little volume, containing the most useful rules and memoranda, practically tested by many years' experience in the shop, factory and building; also a Treatise on the Framing Square. It is by a thoroughly practical man, and contains enough that is not easily found anywhere else to make it worth more than its price to every intelligent carpenter.

WORKSHOP COMPANION. A Collection of Useful and Reliable Receipts, Rules, Processes, Methods, Wrinkles and Practical Hints for the Household and the Shop. By John Phin. This is a book of 164 closely printed pages, forming a dictionary of practical information for mechanics, amateurs, housekeepers, farmers—everybody. It is not a mere collection of newspaper clippings, but a series of original treatises on various subjects, such as alloys, cements, inks, steel, signal lights, polishing materials and the art of polishing wood, metal, etc., varnishes, gilding, silvering, bronzing, lacquering, and the working of brass, ivory, alabaster, iron, steel, etc.

MECHANICAL DRAWING. The Student's Illustrated Guide to Practical Draughting. A series of practical instructions for machinists, mechanics, apprentices and students at engineering establishments and technical institutes. By P. T. Pemberton. Illustrated.

This is a simple, yet thorough book by a draughtsman of 25 years' experience. It is intended for beginners and self-taught students, as well as for those who pursue the study under the direction of a teacher.

HOW TO MIX PAINTS. A simple treatise prepared for the wants of the practical painter. By C. Godfrey. Illustrated.

prainter. By C. Godfrey. Illustrated.

This book is intended for those who have not had the benefit of a long training and experience in the mixing of colors. Simple and clear directions are given, so that by a little practice the reader may be able to mix the various tints and shades of reds, blues, yellows, browns, greens, grays and colors made from blacks, japans, etc. With preliminary remarks on mixing paints, straining paints, tints and shades, use and care of brushes, together with hints on displaying colors to show customers; notes on color harmony, etc., etc.

The books in the list below are all practical and reliable, being specially prepared for self-instruction. The books are 12 mo. in size and contain from 24 to 96 pages, well printed, on good paper, and illustrated wherever the subjects need it. Bound in neat paper covers. Any book sent post paid on receipt of 25 cents. The cheapest series of really good technical books now in print.

RHYMES OF SCIENCE; WISE AND OTHERWISE. By Oliver W. Holmes, Bret Harte. Ingold by Prof. Fobre, Prof. J. W. McQ. Rankine, Hon. R. W. Raymond and others. 66 pages; illustrated. A collection of scientific rhymes that will form pleasant reading for any one interested in science.

USEFUL AND PRECIOUS MINERALS. By John Phin. Tells how to find them; how to test them and how to estimate their value by simple methods and easily obtained appliances. Intended for the use of non-experts so that they may, by simple tests, know if their "find" is valuable or only useless dirt.

TRICHINAE SPIRALIS. By John Phin. How to detect them and how to avoid them.

A popular account of pork-worms and flesh worms for the use of farmers, butchers and microscopists interested in these curious and dangerous parasites.

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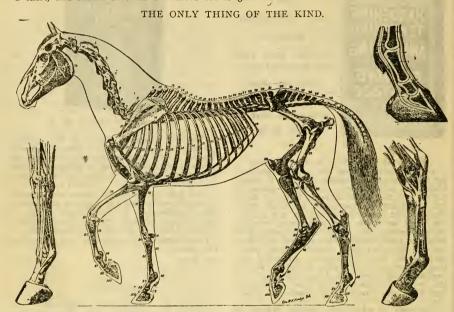
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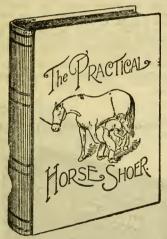
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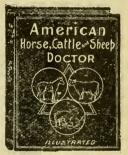
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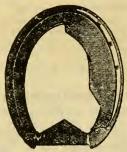
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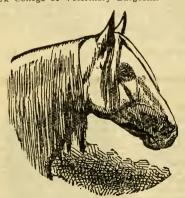
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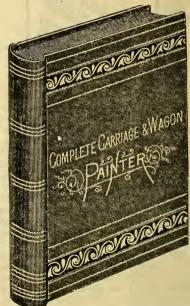
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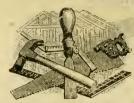
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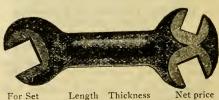
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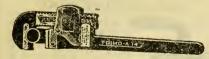


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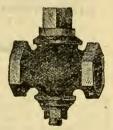
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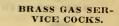
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3/8	inch	36	.04	.48	.05
1/2	inch	42	.05	.60	.06
3/4	inch	60	.03	.72	.08
1	inch	72	.07	.96	.10
11/4		84	.09	1.20	.12
11/2	inch	1.08	.12	2.28	.25
2	inch	1.20	.14	2.64	.28
21/2	inch	2.00	.20		
3	inch	2.40	.25		
4	inch	4.80	.50		

MALLEABLE REDUCING COUPLINGS.

	TITTEL	LLL	DIL	ILLD.	CIIIG	COLLIN	CID.
S	izes.		Net	Price	Sizes.	Net	Price
		1	Doz.	Each		Doz.	Each
	1/4 x 1/8	in.\$	0.24	\$0.03	1 x 3/4	in.\$0.60	\$0.07
	3/8 x 1/4	in.	.24	.03	11/4 x 3/4	in. 1.00	.10
	1/2 x 1/4	in.	.36	.04	11/4×1	in. 1.00	.10
	1/2 x 3/8	in.	.36	.04	1½x1	in. 1.20	.12
	3/4 x 3/8	in.	.42	.05	11/2×11/4	in. 1.20	.12
	3/4 x 1/2	in.	.48	.05	2 x1	in. 1.68	.18
1	X 1/2	in.	.60	.07	2 x1½	in. 1.90	.20

MALLEABLE IRON FITTINGS.







Elbow. Tee. Cross.
PRICE ON ELBOWS ONLY.

		Net	Price.		
		Doz.	Each	Doz.	Each
Si	zes.	Black.	Black.	Galv.	Galv.
1/8	inch	\$0.35	\$0.04		
1/4	inch	35	.04		\$0.05
	inch	35	.04	\$0.48	.06
- 1/2	inch	45	.05	.72	.07
3/4	inch	60	.06	.95	.10
1	inch	95	.09	1.20	.12
11/4	inch	1.20	.11	1,80	.18
1 1/2	inch	1.45	.13	2.40	.26
2	inch	2.25	.22	4.20	.40
21/2	inch	4.20	.40		
	inch	7.20	.70		
4	inch	12.00	1.20		

THE AMERICAN BOILER TUBE CLEANER.

NIPPLES.



		Net price	each.	
Size	S.	Short.		to inches.
1/8	inch	\$0.02	\$0.03	
1/4	inch inch inch inch		.03	
3/8	inch		.03	
1/2	inch		.04	3 1/2
3/4	inch		.05	4
1	inch	01	.06	4
	inch		.08	4 1/2
	inch		.10	4 1/2
2	inch		.13	4 1/2
	inch		.28	5
3	inch		.32	5
4	inch		.55	6

UNIONS.





Malleable Lipped Flanged.
MALLEABLE LIPPED UNIONS.

	*		Net	Price			Net	Price
Siz	es		Each	Doz.	Size	S	Each	Doz.
1/8	inch.		\$0.08	\$0.35	1	inch.	 \$0.18	\$1.65
1/4	inch.		08	.35	11/4	inch.	 .20	2.15
3/8	inch.		.10	.25	11/2	inch.	 .25	2.40
1/2	inch.		.12	1.05	2	inch.	 30	3.00
3/4	inch.		.15	1.20				

FLANGE UNIONS.

0.1	Net Price	1	Net Price
Sizes	Each Doz.	Sizes	Each Doz.
			\$0.70 \$7.20
			80 8.40
			1.00 10.80
2 inch	60 6.00	1	

TEES

TEES.										
		Net	Price	Net Price						
Size	S	Each	Doz.	Sizes Each Doz.						
1/8	inch.	\$0.03	\$0.30	11/4 inch\$0.14 \$1.44						
1/4	inch.	03	.30	1½ inch17 1.80						
				2 inch28 2.64						
1/2	inch.	06	.60	2½ inch45 4.56						
34	inch.	08	.84	3 inch65 6.60						
1	inch.	10	.96							

CROSSES.

					Price
Sizes	Each	Doz.	Sizes	Each	Doz.
1/4 incl	1\$0.05	\$0.48	1 inch	\$0.15	\$1.44
3/8 incl	05	.48	11/4 inch	15	1.44
1/2 incl	06	.60	11/2 inch	20	2.04
	10				

Siz

COMPRESSION BIBBS.



Plain Bibbs

Hose Bibbs

	CO:	MPRI	ESSION	PLAIN	BIBB	S.	
Net	price	each			\$0.50	.55	.60

	COM	PRES:	SION	HOSE	BIBBS.	
ze,	inches	Aach			$\begin{array}{ccc} & \frac{1}{2} & \frac{5}{8} \\ & 0.60 & .65 \end{array}$	3/2
e.	price	each			\$0.00	

MALLEABLE IRON FITTINGS.





CA	T.					30.	TTTT	u.
			CA	PS.				
Sizes. ¼ inch	E	lach.	Doz.	Size	es.		Each.	Doz.
1/4 inch	\$0	.03 \$	0.24	1	inch	\$	0.07	\$0.60
% inch		.03	.24	11/4	inch		.10	.96
½ inch		.04	.36	$1\frac{1}{2}$	inch		.11	1.08
¾ inch		.05	.42	2	inch	• •	.15	1.44

BUSH	IINGS.
Net	Price

		Mer	FIICE		
Sizes.	Each.	Doz.	Sizes.	Each.	. Doz.
1/4 inch	.\$0.03	\$0.24	1½ inch	.\$0.07	\$0.54
3/8 inch	03				
½ inch	03	.24			
¾ inch					1.44
1 inch			4 inch	25	
11/4 inch	06	.48			

MALLEABLE IRON FITTINGS.





Street Elbow

Lock Nut

		Price.	
Sizes.	Each. Doz.	Sizes.	Each. Doz.
3/4 inch	.\$0.05 \$0.48	11/4 inch	.\$0.15 \$1.44
½ inch	06 .60	1½ inch	18 1.80
¾ inch	07 .72	2 inch	25 2.64
1 inch	10 1.08		
	LOCK	NUTS.	

STREET ELBOWS.

Net Price									
Sizes.	Each.	Doz.	Sizes.	Each	. Doz.				
			1 inch						
3% inch	02	.20	1¼ inch						
½ inch	03								
34 inch	04	.30	2 inch	08	.80				

CAST	PLUGS.
Net	Price.

Sizes.	Each.	Doz.	Sizes.	Each	. Doz.
¼ inch	.\$0.02	\$0.18	1 1/4 inch	.\$0.04	\$0.40
			1½ inch		
½ inch	02		2 inch		
	03		2 1/2 inch		
1 inch	03	.30	3 inch	20	2.00

ENGINEER'S FAVORITE TUBE



Sizes.	N	et price	each.	Sizes	s. N	et	price	each.
13/4 i	nch		\$0.60	3	inch			\$0.90
2 i	nch		.65	31/4	inch			.98
21/4 i	nch		.68	3 1/2	inch			1.05
21/2 i	nch		.75	33/4	inch			1.10
23/4 i	nch		.80	4	inch			1.20

STEEL WIRE TUBE CLEANER.



Sizes. Net price each.	Sizes. Net price each.
1 inch\$0.30	2½ inch\$0.60
1 1/4 inch35	2 34 inch65
$1\frac{1}{2}$ inch	3 inch70
1 3/4 inch45	3 1/4 inch75
2 inch50	3½ inch80
2 1/4 inch55	[4 inch90

STEAM, GAS AND WATER PIPE.

BLACK .- Butt Welded.

Sizes.		Net price per foot.
1/8 inch		Prices on application.
¼ inch ¾ inch		Prices on application. Prices on application.
½ inch	I	Prices on application.
34 inch 1 inch		Prices on application. Prices on application.
1¼ inch	I	Prices on application.
	Lap Welde	ed.

	Lap Welded.
Sizes.	Net price per foot.
1½ inch	Prices on application.
2 inch	Prices on application.
2½ inch	Prices on application.
3 inch	Prices on application.
3½ inch	Prices on application.
4 inch	regular lengths Prices on application.
4 inch	short lengths Prices on application.

GALVANIZED.-Butt Welded.

-	
Sizes.	Net price per foot.
3% inch	Prices on application.
½ inch	Prices on application.
¾ inch	Prices on application.
1 inch	Prices on application.
1¼ inch	Prices on application.

Lap Welded.

Sizes.	Net price per foot.
1½ inch	 Prices on application.
2 inch	 Prices on application.
2 ½ inch	 Prices on application. Prices on application.
3 inch	 Frices on application.

WELL CASING.

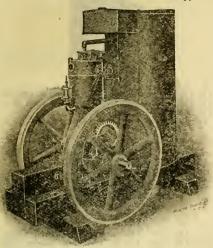
Sizes.		Net price per foot.
41/4 inch	regular lengths.	. Prices on application.
4¼ inch	short lengths	. Prices on application.

COUPLINGS.

Net price each.
4 inch Pipe Couplings..Prices on application.
4 inch Casing Couplings.Prices on application.

THE BARLOW GAS AND GASOLINE ENGINES.

Shipped from factory.



GRAVITY PLAN.

Complete and ready to operate. Gasoline tank hung on edge of the water tank. The construction is of the 4-cycle type, which has proven reliable. Any grade of gasoline, natural or artificial gas, can be used. It is easy to start and easy to operate. These engines are complete as follows:

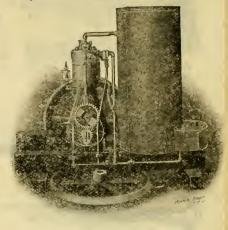
Both water and gasoline tanks, exhaust muffler, starting crank, standard drive pulley, lubricators, electric battery and spark coil, all wired, piped and skidded, ready to run; also can of oil, packings, tools and wrenches.

Gas Engines are fitted with a gas bag in place of gasoline tank,

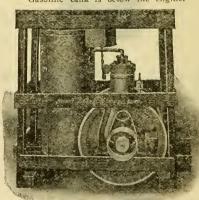
Actual H.P.	Floor Space	Height	Speed	Pulley	Weight
4	28 x 50	50	400	7×5	600
6	30×54	54	350	9×5	900

NET PRICE EACH F. O. B. FACTORY.

4	H.P.	Engine,	Gravity Plan\$ 80.00)
6	H.P.	Engine,	Gravity Plan 115.00)
4	H.P.	Engine,	Pump Plan 85.00)
6	H.P.	Engine.	Pump Plan 120.00)



PUMP PLAN.
Gasoline tank is below the engine.

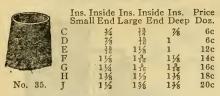


This cut shows engine ready for shipment, and ready to run as soon as tanks are filled. WE WILL MAIL A SPECIAL CATALOG OF THESE ENGINES, GIVING FULL DESCRIPTION AND GUARANTEE UPON APPLICATION.

POLISHED STEEL SHAFTING.

Shipped from factory.







No. 35.



3/4 in. Screw Shank.



No. 120.

C D E
1¼ 1¾6 1½ in. diam. small end.
1½ 1½ 1½ in. diam. large end.
1½ 1½ 1½ 1½ in. deep.
3½ 4 in. long.
12c 13c 14c price per pair.
In pairs, right and left.



No. 125.

 $1\frac{1}{4} \times 1\frac{3}{8}$ $1\frac{1}{4} \times 1\frac{7}{16}$ in. diam. small end $1\frac{5}{16} \times 1\frac{7}{16}$ $1\frac{7}{16} \times 1\frac{1}{16}$ in. diam. large end $1\frac{1}{2} 2\frac{3}{8}$ in. deep. A. Price per pair...12c $1\frac{1}{4} 4\frac{4}{4}$ in. long. B. Price per pair...18c Oval Ferrule. In pairs, right and left.



Hook for Nos. 145 and 150.

½ in. Iron. 4 in. long. Price each......3½c



No. 150.

7% in. wide.
1½ in. between Clips.
10 in. long.
7c Price each.

Used with hook on No. 140.

MALLEABLE IRONS.



A B C D E 1½ 1¾ 1½ 1½ 1¾ 1¾ in. diam, inside small end 1¾ 1½ 1½ 1¾ 1¾ 1½ in. diam, inside large end 1¾ 1½ 1½ 1½ 1½ 1 in. deep. 2c 3c 4c 4c 5c price each.



No. 170.

A B C E
1¼ 1¾ 1½ 1¾ in. diam. inside small end.
1¾ 1½ 1½ 1¾ in, diam. inside large end.
3c 4c 4c 5c price each.
All sizes 1¾ inches deep.

4 in. length of Shank. 16 in. size of Shank. 15 in. center to center. 12c net price each.



No. 200.

Furnished threaded, with Nuts.



No. 600.

 $3\frac{1}{4}$ inches long. $\frac{5}{16}$ inch Bolt. Price per doz.....\$0.03



No. 615.

3 11 inches long. 5 inch Bolt.
Price per doz.....\$0.06



No. 625.

A B C 4 \$\frac{15}{15}\$ \$\frac{315}{3}\$ inches long. \$\frac{15}{15}\$ \$\frac{35}{3}\$ \$\frac{7}{15}\$ inch Bolt. \$\frac{7}{15}\$ \$\frac{15}{3}\$ \$\frac{15}{15}\$ eprice per doz.



No. 630.

A B 34 4½ inches long. 38 inch Bolt. 8c 15c price per doz.



No. 632.

FOR SHAFTS.



FOR POLES.

 Λ D $1\frac{1}{4}\times1\frac{7}{8}$ $1\frac{1}{2}\times2$ in. Evener, $1\frac{1}{9}$ in. Whiffletree $\frac{1}{16}$ $\frac{7}{16}$ in. Bolt. With Check Loop. 0.04 0.05 price each.

No. 633.



No. 635.

FOR SHAFTS.

A B C
3 1/4 3 1/2 3 3/4 in. inside.
3/8 3/8 in. Bolt.
\$0.03 .04 .05 price each.

No. 640.



No. 690.

HIGH PATTERN.

A B C D 13/8 11/2 15/8 13/4 in. wide. 15/8 3/8 3/8 3/8 in. Bolt. \$0.05 .05 .05 .06 price per pair.

MALLEABLE IRONS.



No. 695.

LOW PATTERN.



No. 700.

BIG PATTERN.

В E C 2½ inch wide. 5¾ inch long. 2 1/4 5 1/2 16 1 1/8 11/2 13/4 4 7/8 5 76 inch Bolt.
12 price per pair. 3/8 - 3/8 .07 .09 \$0.05 .06



WITH STOP.

1¾ in. wide. 4½ in. long. ¾ in. bolt. \$0.07° per pair.

No. 705.



1¾ in. wide. ¾ in. bolt. \$0.07 per pair.



No. 710.



WITH STOP.

(Self Locking.)

A B 1½ 1¾ in. wide. 3 3¾ in. long. ½ ½ in. bolt. \$0.05 .07 pair.

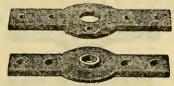
No. 715.

Will not unfasten should the bolt break.



No. 725.

5¾ inch long. 2½ inch bed. ½ inch king Net price per	bolt. pair\$0.10
	S. P. S.



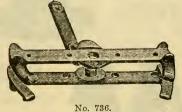
No. 730.

81/8	inch	long.		
	inch			
				circle.
16	inch	king	bolt.	
Net	price	per	pair	



No. 740.

G	Α	Н	В	C	
\$0.21	.26	.34	.35	.45	net price
117/	101/	150	102/	0.0	per pair.
14 1/2	161/2	175/8	$18\frac{3}{8}$	20	in. long.
13/8	1 1/2	15/8	13/4	17/8	in, bed.
1/2	5/8	9 16	5/8	5/8	in. king bolt
J	D	K	E	F	
\$0.61	.65	.68	.80	.98	net price
40.0=					per pair.
21	23	225/8	231/4	225/8	in. long.
2	21/8	21/4	23/8	23/4	in. bed.
3/4	3/4	3/4	3/4	7/8	in, king bolt



1¼ inch head block.

9½ inch circle. 2 inch drop.

7% inch perch.
3% inch king bolt.
Net price per set....
Order by Number.

MALLEABLE IRONS.



No. 737.

IMPROVED PATTERN.

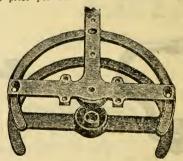
A	В	С	D	E	F			
\$0.20	.22	.24	.22	.22	.24	net	price per	set.
1	11/8	11/4	11/8	11/4	11/4	in.	bolster.	
1.	11/8	11/4	1	1	11/8	in.	axle.	
9							circle.	
3/8	3/8	3/8	3/8	3/8	3/8	in.	king bolt.	



No. 743.

TIMKEN FIFTH WHEEL.

	ch axle.	
11/4	inch head block.	
81/2	inch diameter circle.	
3/8	inch king bolt.	
Net	price per set	.\$0.:



No. 747.

SINGLE REACH GEARS.

3/8 in. clips.

A used with 134 or 2 in. Spring-138 or 158 in. Axle.

B used with 2 or 21/4 in. Spring-11/8 or 15/8 in. Axle.

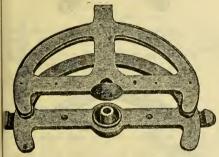


No. 748.

DOUBLE PERCH GEARS.

15/8	in.	width	of	H.	В.	plate.
		diam.				
7/8	in.	width	of	circ	cle.	
		king 1				
1 3/8	in.	perch.				
		clips.				
Used	wi	th 13/4	or	2 ii	n. S	Spring-

Used with 134 or 2 in. Spring—134 to 13/2 inch Axle. Net price per set......\$1.15



No. 761.

FIFTH WHEEL FOR SINGLE PERCH GEARS HEAVY PATTERN.

D	E	Α	В	C		
14						circle.
11/8	11/4	15/8	13/4	2	in.	head block.
11/8	11/4	1.1/4	13/8	11/2	in.	perch.
11/8	11/4	11/8	13/8	15/8	in.	width circle.
1/2	1/2	1/2	5/8	3/4	in.	king bolt.
\$0.75	.85	.90	1.50	2.00	net	price per set.

HOLD BACK.



HOLD BACK.



MALLEABLE IRONS.

NECK YOKE TIPS.



No. 3830.

POLE TIPS.



No. 3845.

			rice each.
$A = 1\frac{1}{8}$	in,	diameter	 \$0.07
B-11/4	in.	diameter	 08
$C-1\frac{3}{8}$	in.	diameter	 09
			 10
6	in.	long.	



No. 3860.

17 in. long. 2½ in. diameter. 1¾ in. loop. ¾ in. holes. Net price each.....\$0.28

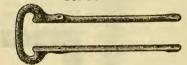


TONGUE CAP.

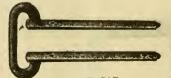
A B

134 2 in. wide inside.
6 6 in. long.
5 75 in. hole.
\$0.10 .12 net price each.

TONGUE CAP.



No. 3875.



TONGUE CAP.

No. 3880.

A 2 1034	B 2.1/4 10.3/4	C 2½ 12¾		n. wide	inside.
7	7	7	J 11	holes.	\$0.30
Net pr	ice eac	n Iumber.			

MALLEABLE IRONS. POLE CRAB.

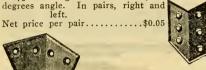


No. 3895.

A—13/8 in. socket. 1½ in. loops. ngth socket. 10 in. length yoke. 6 in. length socket.

.....20c Net price each ... B-1½ in. socket. 1¾ in. loops. 6½ in. length socket. 11 in. length yoke. Net price each

FOR SEAT. 1x1 in. wide, 57 23% in. long. 1xl in. wide, degrees angle. left.



No. 4005.

FOR SEAT.

434 in. long. 21/4 x21/4 in. wide. 63 degree angle. In pairs, right and left. Net price per pair....\$.06

No. 4012. BOTTOM CORNER. 23/4x23/4x37/8 inch. Net price per pair..5c



No. 4360. SQUARE EDGE.

B-3/8 in. wide, 3½ in. long. C-½ in. wide, 3½ in. long. Net price per pair.....\$0.05

No. 4370.

BEVELED EDGE.

No. 4385.

A-5% in. wide, 3½ in. long. B-¾ in. wide, 3½ in, long. Net price per pair....\$0.05

No. 4380.

SOUARE EDGE. A-15 in. wide, 21/2 in.

long. B-7 in. wide, 15/8 in. long. C-1/2 in. wide, 21/4 in.

long. -1/2 in. wide, 23/4 in. D-

long. E-5/8 in. wide, 23/4 in. long. F-34 in. wide, 31/2 in.

long. G-7/8 in. wide, 4 in.

long. Net price per pair.....\$0.05 Order by Number.

MALLEABLE IRONS.

1/2 in. wide, 21/2x21/2 in. ng. For top of beveled long. right angle corner. 26 degrees bevel.

Net price per pair...\$0.05

B-9 in. wide, 25% in. long. D-34 in, wide, 25% in, long.

No. 4410.

For inside of square right angle corner. Net price per pair..\$0.05 A-1/2 in. wide, 21/2x21/2

in. long. 72 degrees angle.

B—½ in. wide, 2¾x2¾
in. long. 75 degrees angle.

For inside of beveled

Net price per pair ...\$0.05



No. 4415.



No. 4405.

34 in. wide, 3½x3½ in. long. 38 degrees bevel. For top of beveled corner. In pairs, right and left. Net price per pair.....\$0.05



No. 4462.

A-9 in. wide. 31/8 in. long from angle. 64 degrees angle. B-5/8 in. wide, 33/8 in. long from angle. 51 degrees angle. C-5/8 in. wide, 31/2 in. long from angle.

In pairs, right and left. Net price per pair.....



13 in. wide. 4x4 in. long. Top of square corner. Net price per pair.....



3% in. wide. 3% in. long. 75 degrees angle. Beveled.

Net price per pair.....\$0.06 Order by Number.



No. 4060. SEAT CORNER IRONS.

SQUARE CORNER.

A B C 234 334 45% in. long 18 34 34 in. wide. 4c 5c 6c Net price per pair



No. 4440.

BEVELED CORNER.

Net price per pair.

A—34 in. wide, 4x4 in. long....\$0.05
B—34 in. wide, 5x5 in. long......06
C—73 in. wide, 5x5 in. long......07
All sizes \$1 degrees angle.



7% in. wide. 4x4 in. long. 65 degrees angle.

Net price per pair.\$0.06

No. 4420.

T PLATES.



No. 3952.

4½ in. long. 2¾ in. T. ¾ in. wide. Net price per pair.....\$0.04



No. 3955.

MALLEABLE IRONS.



No. 3958.

In pairs, right and left.
Net price per pair.....\$0.05





No. 3968.



No. 3970.



No. 3875.

FOR FRONT SEAT. A-5¼ in Panel. 2½ in. length of Goose Neck. 52 degrees angle. B-6 in Panel, 3½ in. length of Goose Neck. 70 degrees angle. C-7 in. Panel. 3 in. length of Goose Neck. 70 degrees angle. Net price each

No. 4600. FOR REAR SEAT.
D-5¼ in Panel, 2½
in. length of Goose Neck. 7 in, Prop Nut. 52 degrees angle. Net price each.....7c

No. 4550.

A-6 in. Panel. 3½ in. length of Goose Neck. 75 in. Prop Nut. 70 degrees angle. C-7½ in. Panel. 2½ in. length of Goose Neck. 75 in. Prop Nut. 72 degrees angle. B-9 in. Panel. 2½ in. length of Goose Neck. 76 in. Prop Nut. 67 degrees angle. TO BE BOLTED TO SEAT.

A-5 in. length over all. 2 in projection.

in projection. Net price per pair.....10c

No. 4905. TO BE ATTACHED TO GOOSE NECK.

71/2 in. length over all. 3 in. height of finger. 1 in. projection. 18 in. hole. In pairs, right and left. Net price per pair.....10c





No. 4915.

Description next column.

MALLEABLE IRONS.

Description of No. 4915.

LAMP PROP.

A-334 in. height of finger. 2½ in. projection. 52 degrees angle.

B-334 in. height of finger. 3½ in. projection. 72 degrees angle. Net price per pair.....10c

SEAT HANDLE.

234 in. center to center of holes. 7½ in. entire length.



No. 4335. COACH STEP HANDLE. 3 ½ in. wide inside. 5 in. long.

Net price per pair..15c

No. 4340.



SEAT HANDLE. 5 in. Panel.

In pairs, right and left. Net price per pair....13c

No. 4235. Net price per pair10c



No. 4245.

SEAT HANDLE.

5¾ in. Panel. ¼ in. wide. 3¼ in. foot projection. 1¼ in. throw-out. 52 degrees angle. In pairs, right and left.



SEAT HANDLE.

5¼ in. Panel. 7% in. wide. 3¼ in. foot projections. 1¼ in. throw-out. 52 degrees angle. In pairs, right and left. Net price per pair......13c



63/8 in. Panel. 7/8 in. wide. 63/4 in. inside corner of seat to center Back Iron. 11/8 in, throw-out Side and Back. 51 degrees angle of Foot. 66 degrees angle of Corner. In pairs, right and

No. 4080. Net price per pair14c

SEAT IRON. A-4 in. length of Brace. 34 in. wide. 11/8 in. throw-out. 53 degrees angle. B—4 in. length of Brace. 34 in. wide. 1½ in. throw-out. 53 degrees angle. Net price per pair......5c No. 4120.

No. 4160. SEAT IRON.

D-51/8 in. Panel. 34 in. wide. A-51/8 in. Panel. 34 in. wide. B-6 in. Panel. 34 in. wide. C-61/2 in. Panel. 18 in. wide. All sizes 11/4 in. throw-out. All sizes 50 degrees

MALLEABLE TRONS.



47% in. Panel. 34 in. wide. 11/4 in. throwout. 41 degrees angle. Net price per pair



No. 4195. SEAT IRON.

6 in. Panel. 11 in. wide. 11/4 in. throw-out. 40 degrees angle. Net price per pair.....



No. 5150.

CANOPY TOP IRONS. USED EITHER ON TOP OR BOTTOM OF BODY.

Net price per pair15c



No. 5145.



CANOPY TOP IRON.

A-6 in. Panel. 15 in. wide. 1½ in. projection to center of hole. ½ in. Socket. 15

jection to center of hole. ½ in. Socket. 18 in. depth of Boss. 70 degrees angle.

B—7¼ in. Panel. 18 in, wide. 1½ in. projection to center of hole. ½ in. Socket. 18 in. depth of Boss. 62 degrees angle.

C—7¼ in. Panel. 18 in. wide. 1¾ in. projection to center of hole. ½ in. Socket. 18 in. depth of Boss. 70 degrees angle.

D—6½ in. Panel. 18 in. wide. 1½ in. projection to center of hole. ½ in. Socket. 18 in. depth of Boss. 75 degrees angle.

Net price per pair

Net price per pair17c



No. 5070.

CANOPY TOP IRON. 61/2 in. length of Back Plate. 15 x1/2 in. Socket.



BOX ROD NUTS AND WASHERS.

In pairs. B-3/8 in. Rod. 31/2 in, long.

No. 5875. Net price per pair5c Order by Number.

MALLEABLE IRONS.



No. 5475.

LOW PATTERN.

					Net price per doz.
A—¹¼	in.	holes.	11	in.	high 5c
$B - \frac{5}{16}$	in.	holes.	3/4	in.	high 8c
C-3/8	in.	holes.	7/8	in.	high10c
D7	in.	holes.	15	in.	high12c
E-1/2	in.	holes.	1	in.	high15c
G5/8	in.	holes.	11/4	in.	high40c
Thes	se r	uts h	ave	stra	light holes, same as
drilled	(no	t taper	ed)	and	are ready to tap.

BOX ROD NUT. B-3/8 in. Rod. 41/4 in. long. Net price each..3c



No. 5920.





No. 5980.

STAKE RINGS.

Net price per doz. C-7/8 in. Stake. 11/2 in. Ring. 16 in. Wire D-78 in. Stake. 134 in. Ring. 16 in.15c Wire E-1 in. Stake. 15% in. Ring. 3/8 in.20c Wire Stake. 2 in. Ring. F-1 in. Stake. Wire ...



No. 5990.

BOW IRONS.

Net price each.



No. 5990. BOW IRONS.

Price each.



No. 6055.

BOW IRONS. E F G D 34 34 in. deep inside. 1½ 2 in. wide inside. 3½ 4 in. long. 5/8 13/4 11/4 31/2 37/8 .20 .15 .18 .20 net price doz. \$0.15 .18



No. 6060. BOW IRONS.

B-¾ in. deep inside. 1½ in. wide inside. C-¾ in. deep inside. 1¾ in. wide inside. Holes for ¼ inch bolts. Net price per doz



WAGON STAKE IRONS.

11/4 13/4 in. Stake.

51/2 21/2 in. deep.

Holes for 3/4 inch bolts Price each\$0.06

No. 6005. in. Stake. 234 in. deep.
Holes for 36 in. bolts.
Price each\$0.07



No. 6010.

WAGON BOX BRACES. C-8 in. high from shoulder. C—8 in. high from shoulder.

10¼ in. entire length. 3 in.

projection. \(\frac{7}{8} \) in. shank. 2¼ in.

length of Shank. Each...\$0.07

A—9¼ in. high from shoulder. 12 in. entire length. 3 in.

projection, \(\frac{7}{6} \) in. Shank. 3¼ in.

length of Shank. Each...\$0.07

B—10¾ in. entire length. 3½

in. projection. \(\frac{7}{6} \) in. Shank. 2½

in. length of Shank. Each...\$0.08

D—12 in. high from shoulder.

D-12 in. high from shoulder. 14½ in. entire length. 3 in. projection. 75 in. Shank. 1½ in. length of Shank. Each..\$0.10

Order by Number.

MALLEABLE IRONS.

TOE BOARD BRACKET.

634x634 in. long. 1 in. wide. 1/4 in. holes. Net price per pair....\$0.15

No. 6085.



No. 6365.

BRAKE LOCK SHOES.

Price per pair. A-21/4 in. deep. 31/8 in. taper of block, large end. 31/8 in. taper of block, small end. 34 in. depth of flange.......\$0.15
B—2½ in. deep. 3½ in. taper of block, large end. 3½ in. taper of block, small end. 1½ in. depth of flange........30

WAGON BOLSTER BRACE.

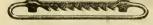
Price per pair. A-78 in. wide. 618 in. high, 15 in. bolt. 334 in. bolster bearing...\$0.10

B-1 in. wide. 61/4 in. high. 3/8 in. bolt. 23/4 in. bolster bearing...

All 86 degrees Bevel.

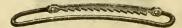


No. 6160.



No. 6307.

Nct price each. 12½ in. long. 2¾ in. wide. 8¾ in. center to center of holes. ¼ in. bolts....\$0.15



No. 6310.

Net price each. 19 in. long. 334 in. wide. 12 in. center to center of holes. 16 in. bolts.....\$0.25 Order by Number.

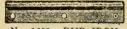
No. 6170.

MALLEABLE IRONS. RUB IRON.



No. 1600.

Net price per pair.
A-3 inches long\$0.05
B-4½ inches long
C-5 inches long
D-6 inches long
All sizes 16 in. wide inside flange.



No. 1602. RUB IRON.

Net price per pair. 6½ in. long. 1 in. wide inside flange....\$0.07

RUB IRON.

2 in. wide 4½ in. long. Per pair, \$0.07



No. 1605.



No. 1655. RUB IRON.

5½ in. long on face. 6¾ in. long on back. 2¼ in. wide. Per pair................\$0.07



No. 1680.

RUB IRON FOR LUMBER WAGONS.



No. 1620. RUB IRON.

Price per pair.

A-6 inches long. 2½ inches wide....\$0.07

B-6½ inches long. 3 inches wide.....09



No. 1623. RUB IRON.

MALLEABLE IRONS.



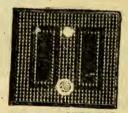
No. 1645. RUB IRON.

6½ inches long. 2½ inches wide. Net price per pair.....\$0.10



No. 1717. STEP PAD.

A-41/8 x41/8 inches. Net price per pair .. \$0.15



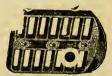
No. 1719. STEP PAD.

A-33/4x41/4 inches. Net price per pair..\$0.15



No. 1726. STEP PAD.

A-41/2 inches. Price per pair......\$0.12

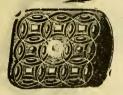


No. 1728. STEP PAD.

A-3½x3½ inches. Price per pair.....\$0.08 B-4x3¾ inches. Price per pair.......10 Order by Number.



No. 1729. STEP PAD. 41/4x4 inches, net price, pair....\$0.10



No. 1740. STEP PAD.

A—Price per pair.....\$0.08 33/8x31/4 inches B—Price per pair......10 4x37/8 inches



No. 1752. BODY STEP.

1 in. drop. 41/4x41/8 in. Pad. 11/8 in. center to center of holes. 5 in. holes. Net price per pair\$0.25



No. 1753. BODY STEP.

34 in. drop. 3½x3¾ in. Pad. 1¾ in. center to center of holes. § in. holes. Net price, per pair



No. 1756. BODY STEP.
34 in. drop. 4¼ in. diameter of Pad. 1½
in. center to center of holes. 56 in. holes. Net price per pair.....\$0.20

MALLEABLE IRONS.



No. 1759. BODY STEP.

34 in. drop. 4x41/4 in. Pad. 11/8 in. center to center of holes. 1/8 in. holes. Net price per pair\$0.25



No. 1768. BODY STEP.

34 in. drop. 41/8x4 in. Pad. 11/8 in. center to center of holes. 15/8 in. holes. Net price per pair\$0.20



No. 1769. BODY STEP.

34 in. drop. 51/4 in. projection. 4x4 in. Pad. 2 in. center to center of holes. 1/8 in. holes. Price per pair.....\$0.25



No. 1775. BODY STEP.



No. 1855. BODY STEP.



No. 1854. BODY STEP.

 $2\frac{3}{4}$ in. drop. $5\frac{1}{4}$ in. projection. 4x4 in. Pad. 5 in. center to center of holes. $\frac{5}{16}$ in. holes. Price per pair......25c



31/2x4 inch Pad.

No. 1871. 15% 15% in. depth of Ears. 11/4 11/2 in. Spring. Per pair10c

3/8 3/8 in. hole. No. 1872. Nos. 1871 and 1872 used together for Platform Gears. Per pair.....10c

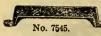


No. 1875. PLATFORM STEP.

A—1¼ in. spring. 3½x3½ in. Pad. 2½ in. wide inside. 1½ in. drop. B—1¾ in. spring. 3½x3½ in. Pad. 2½ in. wide inside. 1½ in. drop. C—1½ in. spring. 3½x3½ in. Pad. 2¾ in.

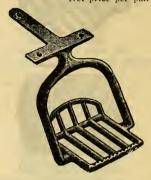
wide inside. 1½ in. drop.
Net price per pair.....
Order by Number.20c

MALLEABLE IRONS.



SLEIGH SCRAPERS. 55% in center to

center. Net price per pair....8c



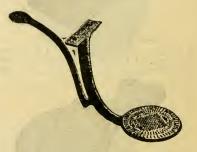
No. 1889. SLEIGH STEP.

 $4\frac{1}{2}$ in. drop. $4\frac{1}{2}$ in. projection. $3\frac{1}{2}x3\frac{3}{4}$ in. Pad. $\frac{7}{8}x4x4\frac{3}{4}$ in. T. $\frac{7}{16}$ in. hole. Net price per pair



No. 1895. TIMKEN STEP.

 $A-4\frac{1}{4}$ in. drop. $4\frac{1}{4}$ in. projection. $3\frac{1}{2}$ x $3\frac{1}{2}$ in. Pad. $1\frac{1}{4}$ in. Clip Yoke. 5 in. T. $\frac{5}{18}$ in. Clip. Net price per pair......30c



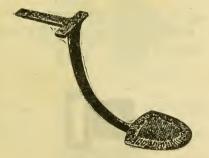
No. 1901. RAISED BOTTOM.

B-61/2 in. drop. 7 in. projection. 41/2 in. Pad. 7/8 x4 in. T. Net price per pair......35c



No. 1903. BUGGY STEP.

Price	e per pair
A-61/2 in. drop. 63/4 in. projection.	
x4 in. Pad. 7/8x4 in. T	
in. Pad. 7/8 x 4 in. T	40
C-934 in. drop. 6½ in. projection.	
4½ in. Pad. 78x4¼ in. T E-11 in. drop. 5 in. projection.	
in. Pad. 7/8 x4 in. T	48



PHAETON OR BUGGY STEP. No. 1907.



No. 1951. SHAFT STEP.

Order by Number.

MALLEABLE IRONS.



No. 1921. PHAETON STEP.

D-6½ in. drop. 6 in. projection. 5 in. Pad. 7%x4x5¾ in. T. ¼ in. raise to back T. In pairs, right and left. The T is curved to shape of Phaeton body sill. Per pair....\$0.35



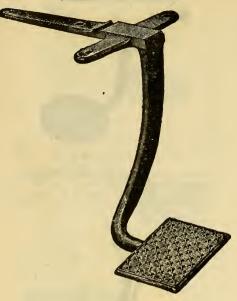
No. 1947.

Price per pair.



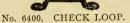
No. 1909. BUGGY STEP.

Price per pair.\$0.35 .30



No. 1960. EXPRESS WAGON SHAFT STEP.

A-7½ in. drop, 6¼ in. projection, 3¾x4¼ in. Pad. 1¼x9½ in. T. fs in. square holes. B-9 in. drop, 6½ in. projection, 35xx4⅓ in. Pad. 1¼x7x9½ in. T. ¾ in. square holes. In pairs, right and left, per pair.....\$0.65



.10 per doz.

C D E F 1½ 2¾ 11/2 134 in. loop. 3½ in. long. 11/4 31/4

3

.08

.08

21/2

\$0.06 .06



.10

No. 6405. NECK YOKE LOOP.

7/8 in. wide. 15/8 in. loop. 3/16 in. holes. Price per doz., \$0.20.



No. 6427. OVAL CHECK LOOP.

F В D E 11/8 1½ in. loop. 2½ in. long. 11/4 15/8 .20 .22 .24 per doz. 18 \$0.16 .18 18 .20 Order by Number.

MALLEABLE IRONS.



EXPRESS WAGON SHAFT No. 1955. STEP.

4½ in. drop. 5¾ in. projection. 3x3¾ in. Pad. ½x4½x4½ in. T. In pairs, right and left, per pair.....\$0.30

Order by Number.



SQUARE CHECK LOOP. No. 6430.

D E C A 1½ in. loop. 11/4 7/8 11/8 2 21/8 in. long. 13/4 17/8 1 1/8 .20 .24 per doz. \$0.16 .18 .18

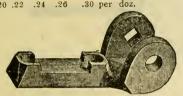


No. 6435. OVAL CHECK LOOP.

F E В C D 1½ 2½ 2½ 11/4 11/2 in. loop. 33% in. long. 23/4 3 .30 per doz. .22 .24 .22 \$0.20 .20



SQUARE CHECK LOOP. No. 6437. В C Ď E 1½ in. loop. 3½ in. long. 1 1/8 1 1/4 3 1/4 1 23/4 3 \$0.20 .22



No. 3907. SLEIGH SHACKLE. In pairs, right and left.

Draw Shaft Clip. Eyes. Per pair. Axle. Bolt. 1 in. 1½ in. 1¼ in. ⁵/₆ in. ³/₈ in. ³/₈ in. A B C 3/8 in. 1 in. \$0.10 3/8 in. 13/8 in 15 in. 11/4 in. .12 .14



No. 6650. SPRING TOP PLATE.

With Square Holes.

Ε F 1½ 1¼ 3/8 13/8 11/2 in. Spring 11/4 11/4 11/8 11/8 11/4 11/8 in. Axle. 3/8 3/8 in. hole. 3/8 .04 1/2 .04 1/2 .05 price each \$0.03 .03 1/2 .04



No. 6667. AXLE BOTTOM PLATE.

With Round Holes.

Nos. 6650 and 6667 are used together in pairs. Net price each\$0.02



No. 6615. SPRING BLOCK.

A B C G H D E F
1 1½ 1½ 1½ 1½ 1¼ 1¼ 1¼ 1½ 1¾ 1% in. Axle
1¼ 1¼ 1½ 1½ 1½ 1½ 1½ 1¾ 1¾ 1½ 1¾ ix. Spring.
5½ 5½ 5½ 5% 5½ 55 55 6 in. long.
\$0.07.08.08.09.09.10.10.15 each. Order by Number.

MALLEABLE IRONS.



No. 6620. SPRING BLOCK.

A В C D Ε \mathbf{R} 1 1/4 1 1/2 7 1/2 7 6 .12 13% in. Axle. 1½ in. Spring. 7½ in. long. ¼ in. holes. 11/8 11/8 11/8 11/4 13/8 71/4 3/8 6 .12 \$0.08 .08 .10 .12 each.

SPRING SHACKLE

 \mathbf{B} C D 1 ½ 1 ¾ 1 ¾ 11/8 11/4 in. Bar. 1¼ in. Spring.
5 in. holes. 5 16 Net price each, \$0.03.



No. 6835.



No. 6775. MEDIUM PATTERN.

3/8 in. Thick in Pairs. C D В

13/8 11/2 13/4 in. from center to center 11/4 of holes.

3/8 3/8 3/8 in. holes. 3/8 Net price per pair, \$0.05.



No. 6765. SPRING SHACKLE.

D В C 11/2 x11/2 11/4 x 11/4 11/4 x 1 1/2 13/8 x 13/8 in. holes. 3/8 3/8 3/8 .04 price each. .04 \$0.03 .03



No. 6780. SPRING SHACKLE.



No. 7320. BUGGY WRENCH, DEEP PATTERN.

Net price each. Λ-3/4 in. Axle Nuts. 1/2, 5/8, 3/4 in. open-9 in. long.....\$0.04 B-7/8 in. Axle Nuts. 1/2, 5/8, 3/4 in. opening. 9 in. long04 C-1 in. Axle Nuts. ½, 5%, ¾ in. opening. 9½ in. long04 D-11/8 in. Axle Nuts. 1/2, 5/8, 3/4 in. .05 opening. 10 in. long E-11/4 in. Axle Nuts. 1/2, 5/8, 3/4 in. opening. 10 in. long06 F-13% in. Axle Nuts. ½, 5%, ¾ in. opening. 10½ in. long .07 G-1½ in. Axle Nuts. ½, 5%, ¾. in. opening. 12 in. long08 H—134 in. Axle Nuts. 58, 34, 78 in. opening. 12 in. long J.-2 in. Axle Nuts. 58, 34, 78 in. opening. 12 in. long

No. 7325. BUGGY WRENCH, OCTAGON PATTERN.



Each. A—To take Hexagon Nut for ¾ in. Axle ½, ¾, ¾ in. opening. 7¾ in. long....\$0.05 B-To take Hexagon Nut for 1/8 or 1/6 in. Axle. 1/2, 5/8, 3/4 in. opening. 73/4 in. .05 C-To take Hexagon Nut for 1 or 11 in. Axle. 1/2, 5/8, 3/4 in. opening. 81/4 in. .06 D-To take Hexagon Nut for 11/8 in. Axle .07 1/2, 5/8, 3/4 in. opening. 81/2 in. long.. E-To take Hexagon Nut for 11/4 in. Axle .08 1/2, 5/8, 3/4 in. opening. 9 in. long..... F-To take Hexagon Nut for 13% in. Axle 1/2, 5/8, 3/4 in. opening, 9 in. 10ng.....

No. 7338. FINISHER'S WRENCH.



For Blacksmiths or Gear Workers.

Price each.

3\formalfont{\frac{3}{16}} \text{ and } \frac{1}{14} \text{ in. Bolts.} \\
\frac{3}{8}\times \frac{1}{2} \text{ in. opening.} \\
\frac{1}{16} \text{ and } \frac{1}{16} \text{ in. Bolts.} \\
\frac{1}{2}\times \text{ in. opening.} \\
\frac{1}{2}\times \text{ in. Bolts.} \\
\frac{1}{2}\times \text{ in. opening.} \\
\frac{1}{2}\times \text{ and } \frac{1}{16} \text{ in. Bolts.} \\
\frac{1}{2}\times \frac{1}{2}\times \text{ in. opening.} \\
\frac{1}{2}\times \text{ and } \frac{1}{16} \text{ in. Bolts.} \\
\frac{1}{2}\times \text{ in. opening.} \\
\frac{1}{2}\times \text{ in. Bolts.} \\
\frac{1}{2}\times \text{ in. opening.} \\
\frac{1}{2}\times \text{ in. Bolts.} \\
\frac{1}{2}\times \text{ in. opening.} \\
\frac{1}{2}\times \text{ in. Bolts.} \\
\

PERFECTION DOOR LATCH.



No. 5686. 10¾ in. long, 2¼ in. wide. Net price each......\$0.50 For right hand door only.

END GATE FASTENERS.



No. 5697.

A B C D E F G ½ 5% ¾ ½ 1% 1 1½ 1½ in. Panel 8½ 8½ 8% 9½ 9¾ 9¾ 10¾ 10¾ in. legth Sp'g \$0.22 .24 .25 .26 .27 .30 .37 per pair. Crucible Steel Springs.

END GATE HINGES.



No. 5810.

A B 9 13 in. Panel. 34 1 inch wide. \$0.22 .29 per pair.

UMBRELLA HOLDERS.

No. 5960.

A B
1½ 1½ in. diam. hole.
1½ 1½ in. deep.
\$0.05 .10 net each.



A B 1½ 1¾ in, diam, hole. 1 1 in, deep. \$0.05 .10 net each.

WYETH RUNNER ATTACHMENTS.



Adjustable, Narrow or Wide Track.

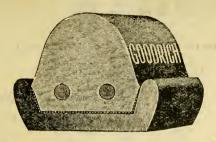
Net price set.

No. 1, 7% Axle Weight 45 lbs. \$5.85 No. 2, 1 Axle Weight 45 lbs. 5.85 No. 3, 1½ Axle weight 50 lbs. 6.75 No. 5, 1½ Axle Weight 60 lbs. 7.00 No. 6, 1½ Axle Weight 60 lbs. 7.00 No. 7, 1½ Axle Weight 75 lbs. 7.95 No. 7, 1½ Axle Weight 75 lbs. 8.25 No. 8, 15% Axle Weight 85 lbs. 8.75 No. 9, 1¾ Axle Weight 85 lbs. 8.75 No. 9, 1¾ Axle Weight 85 lbs. 9.00 For Carriages, Buggies, Grocers' Wagons, Hacks, Omnibuses, Laundry Wagons, Surreys, Phaetons, Dairymen's Wagons, Hearses, Oil Tank Wagons, and all kinds of low down vehicles. Clamps attach to square part of axle, relieving spindles from strain. Rea Runners are two inches higher than the front,

so vehicle will set level. Painted vermillion.

RUBBER TIRE.

Shipped from factory.



We can either furnish you with new wheels having rubber tire or can put new rubber on your old wheels. We use only the very best grade of rubber, and can give you prompt service at all times.

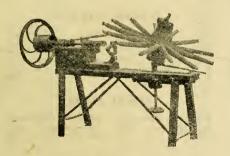
NET PRICE OF RUBBER TIRE.

Per Strip Enough for One Wheel.

Sizes, inches 34	7/8	1	1 1/8	1 1/4
For Wheels 3 feet 2 inches diameter (or under)\$1.82				
For Wheels 3 feet 4 inches diameter 1.90				
For Wheels 3 feet 6 inches diameter 2.00	2.27	2.80	4.45	5.70
For Wheels 3 feet 8 inches diameter 2.12	2.38	2.92	4.55	5.90
For Wheels 3 feet 10 inches diameter 2.18			4.80	6.10
For Wheels 4 feet diameter 2.30	2.55	3.18	5.00	6.40

We are in a position to give you the best of satisfaction by placing Goodrich solid rubber tires on your new or old wheels, also by re-rubbering your old channels. Send us the height and tread of your wheels and the size tire desired and receive our prices. Where re-rubbering is desired the old channels must come to us in good condition and perfectly clean.

See our prices on new wheels and get our prices for furnishing whatever size you desire complete with Goodrich solid rubber tires put on.



DAVIS PATENT TENON MACHINE.

For light or heavy work; to be used by hand or power; fitted with tight and loose pulleys. When run by power remove crank wheel and put on collar. Cuts tenons up to 1¼ inch to 4 inches long. Any Hollow Auger with ½ round shank may be used or chuck for square shank auger will be furnished if desired. Hub of wheel held on self-centering rest which can be raised, lowered, or tilted to adjust spoke to auger, thus all tenons are cut uniform. The only machine on the market that a

tenon may be cut straight with the spoke on a dishing wheel.

Power machine, without auger, each\$32.0	00
Hand machine without auger, each	00
With Wood's Universal Hollow Auger, extra	0.0

DOORS-WINDOWS AND PORCH TRIMMINGS.

We carry 'a complete line of building material and are offering to our customers, for the first time, doors, windows, and porch trimmings through our catalogue. Our stock of these goods is selected and of the very best quality and we have made our prices as low as possible.

4-PANEL DOORS IN WHITE.

	No. 1.	No. 2.	No. 2.
	13% Thick	11/2 Thick	13% Thick
	Price	Price	Price
Size.	Each.	Each.	Each.
2°x6°	\$	\$1.52	\$1.84
2^{0} x 6^{6}		1.68	1.85
20x68		1.77	1.87
$2^{2} \times 6^{6}$		1.77	1.89
24x64		1.65	
24x68		1.77	1.89
24x68		1.80	••••
28x68	2.17	1.77	1.96
28x68	2.24	1.82	2.01
28x610			2.31
30x70	2.87		2.59
	1 26x66 Painted		1.46
Specia	al 28x68 Painted	1.41	1.54
Specia	ii w no I dilitod		

WINDOWS-1% THICK.

In measuring windows the size of the glass is given and not the opening the window will fill. The width of the glass is always given first.

2 Light Check	Rail. Price	4 Light Check Rail. Price
Size of Glass.	each.	Size of Glass. each.
20x24	.\$0.90	12x24\$1.02
20x26	99	12x26 1.07
20x28		12x28 1.14
20x30		12x30 1.25
24x20		14x24 1.13
24x24		14x26 1.25
24x26		14x28 1.31
24x28		12 Light Plain Rail.
24x30 26x28		11/2 inch.
		Size of Glass. each.
26x30	. 2.00	8x10\$0.88
		8x12 1.01
28x30	. 1.39	10x12 1.14
		10X12 1.14

CELLAR SASH.

	Single	Double
3 Light	Glaze.	Glaze.
	Price each.	Price each.
8x10	\$0.45	\$0.70
8x12		.78
9x12		.81

2-LIGHT SINGLE GLAZE.

	Price each.
12x14	 \$0.56
12x16	 59

TRANSOMS-1 LIGHT.

Size of Glass.	Price each.
32x16—1 Light	

1-LIGHT HOUSE SASH.

Size	of	G	1	as	SS	5.															ch	
20x1	9.																		. :	\$0	.71)
20x2	4.																				.7	5
24x2	4.																				.8	6
24x2	8.																				.9	3
24x3	0	:.																			.9	8

1-LIGHT STALL SASH.

Size of	Price each.
12x16 .	 \$0.42

COTTAGE CHECK RAIL WINDOWS.

With	plain upper	sash.
Size of	Size of	
lower sash.	lower sash.	Price each.
36x42	36x14	\$3.00
36x44	36x16	3.25
40x40	40x16	3.57
44x40	44x16	4.33
44×44	44x16	4.69
48x44	48x16	5.18
With fancy u	pper sash.	
36x40	36x16	3.20
40x40	40x16	3.58
44x40	44x16	5.51

BRACKETS.

		eacn.
0x12	Corner brackets	 .\$0.10
8x20	Face brackets	 25
	Face brackets	
	Face brackets	

BALUSTERS AND SPINDLES.

13/4×20	and 24	inches	long,	price	each.	9	0.05
1¾x10	Spindle	s, price	each				.03

BLOCKS.

		Price each			Price each\$0.10
4 1/2	Corner	\$0.05	4 1/2	Plinth	\$0.10
5	Corner	05	5	Plinth	10

TURNED COLUMNS.

Size. Pric				Price each.
4x4-8 ft				\$1.35
5x5—8 ft		6x6-9	ft.	1.85
6x6—8 ft 8 in. Round—	1.55			\$9.50
8 in. Round-	-8 It			n e5
8 in, Round-	9 16			6.00

NEWEL POSTS.

	Price each.		Price each.
5x5 Plain	\$0.70		d\$0.75
6x6 Plain	80	6x6 Turne	$d \dots .85$

PORCH RAIL.

134x3 Top or Bottom, price per ft.....\$0.04

LATH AND SHINGLES.

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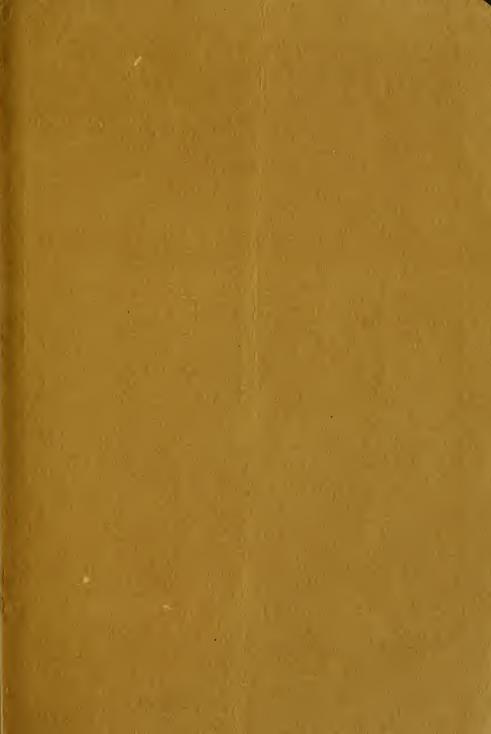
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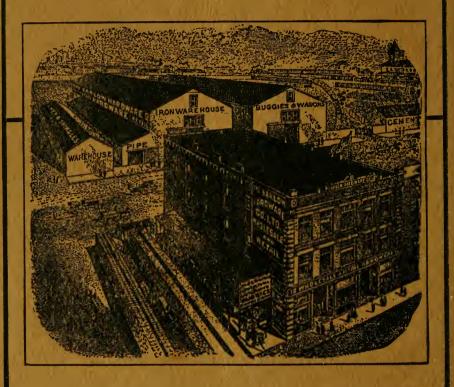
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